

DRAFT

**WASHINGTON STATE
WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD
MEETING NO. 110
May 11, 2006**

**WORKFORCE TRAINING RESULTS 2006
PART 1**

This is a draft of the first section of *Workforce Training Results 2006*.

Workforce Training Results is a biennial study of the training and employment outcomes of major workforce development programs in Washington. Part 1 of this report includes information on training and employment outcomes, including participant and employer satisfaction information. Part 2 of the report will include net the impacts and cost-benefit analyses of these programs.

The 2006 report focuses on those individuals who left their programs during the 2003-2004 program year. Unlike the individuals who were the focus of the 2004 report and had exited their program in 2001-2002, these individuals left entering an economy that was on its way to recovering from the 2001 recession.

Some of the results appear to reflect the economic recovery with better results in employment rates and wages and earnings. In general, however, the findings of this report are similar to those in 2004.

The draft report includes results for 11 programs. We expect to receive data soon that will enable us to add WorkFirst as a 12th program for the final report.

Board Action Required: None. For discussion purposes only.

WORKFORCE TRAINING RESULTS 2006

EXECUTIVE SUMMARY

Introduction

This is the sixth biennial outcome evaluation of Washington State's workforce development system. It analyzes the results of 11 of the state's largest workforce programs. These programs account for over 90 percent of public expenditures in the workforce development system.

The purpose of this evaluation is to report the results of workforce development and to recommend areas for improvement. The report discusses program results for seven desired outcomes for the state workforce development system established by the Workforce Training and Education Coordinating Board (Workforce Board). These desired outcomes are not static targets, but are conditions that should be increasingly true for all people.

Seven Desired Outcomes for the State Workforce Development System

Competencies: Washington's workforce possesses the skills and abilities required in the workplace.

Employment: Washington's workforce finds employment opportunities.

Earnings: Washington's workforce achieves a family-wage standard of living from earned income.

Productivity: Washington's workforce is productive.

Reduced Poverty: Washington's workforce lives above poverty.

Customer Satisfaction: Workforce development participants and their employers are satisfied with workforce development services and results.

Return on Investment: Workforce development programs provide returns that exceed program costs.

The Programs

The programs included in this evaluation are grouped into three categories based on participant characteristics. Five programs serve adults, four serve adults with barriers to employment, and two serve youth.

Programs for Adults

Community and Technical College (CTC) Job Preparatory Training: Training and education for a Vocational Associate of Arts Degree or a Vocational Certificate. This training does not include retraining of unemployed workers and classes taken by current workers to upgrade skills for their current job, nor does it include the other two mission areas of the colleges—academic transfer education and basic skills instruction.

Private Career Schools: Training provided by private businesses for students intending to complete vocational certificates or degrees. The schools are licensed by the Workforce Board or, if they grant a degree, by the Higher Education Coordinating Board.

Apprenticeship: Training that combines classroom instruction with paid, on-the-job training under the supervision of a journey-level craft person or trade professional. Apprenticeships are governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.

Worker Retraining at Community and Technical Colleges: Provides dislocated workers and the long-term unemployed with access to job retraining for a new career. About 5 percent of worker retraining participants receive their training at private career schools. This evaluation, however, is limited to the public colleges.

Workforce Investment Act (WIA) Title I-B Dislocated Worker Program: Federal employment and training program for dislocated workers. The Employment Security Department (ESD) administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas.

Programs Serving Adults With Barriers to Employment

Adult Basic Skills Education/English as a second Language (ABE/ESL): Literacy and math instruction for adults who are at a high school level or below. Includes courses in four categories: ABE for adults whose skills are at or below the eighth grade level; ESL; GED Test Preparation; and High School Completion for adults who want to earn an adult high school diploma. Students receiving both basic skills instruction and job training are included in the evaluation of the job preparatory training or worker retraining programs and not the evaluation of basic skills instruction. Community and technical colleges and other organizations such as libraries and community-based organizations provide basic skills instruction.

WIA Title I-B Adult Program: Federal employment and training program for adults who experience significant barriers to employment. ESD administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas.

Division of Vocational Rehabilitation (DVR): Services offered by DVR help eligible individuals with disabilities become employed. Eligibility requires that the individual have a physical, mental, or sensory impairment that constitutes or results in a substantial impediment to employment and that they require DVR services to enter or retain employment.

Department of Services for the Blind (DSB): Vocational rehabilitation services, counseling, training, and assistive technology to help participants achieve successful employment outcomes are offered by DVR. In order to receive services, an individual must be legally blind or have a visual disability that causes an impediment to employment, and vocational rehabilitation services are required for the individual to prepare for, enter, engage in, or retain employment.

Programs Serving Youth

Secondary Career and Technical Education (CTE): Training and vocational education in high schools and vocational skills centers in agriculture, business, marketing, family and consumer sciences, technology, trade and industry, and health occupations.

WIA Title I-B Youth Program: The Preparation for youth for academic and employment success. In order to receive services, youth must be 14 through 21 years old, low income, and meet other criteria such as needing additional assistance to complete an educational program or to secure and hold employment. ESD administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas. Local youth councils assist the councils with the Title I-B Youth program.

We caution against making improper comparisons among these programs—the populations served, the types of services provided, and lengths of training vary substantially from program to program.

Data

Findings are based on the following sources of data:

- Program records on over 103,440 individuals who left one of these programs during the 2003-2004 program year. These records include information on all or most participants leaving these programs.
- Telephone survey responses from 1,361 firms that hired new employees who had recently completed one of the programs.
- Telephone survey responses from approximately 7,185 participants who left one of these programs during 2003-2004.¹

¹ DVR and DSB respondents were provided the option of a mailed survey: 38 percent of DVR and 18 percent of DSB respondents took that option. The sample sizes for the telephone survey vary by program. Samples are larger for programs that required a regional component to the analysis: these include CTC Job Preparatory, Secondary CTE, and WIA Title I-B programs. As a result, the precision of reported statistics vary. For example, the 95 percent confidence interval for overall satisfaction with the program is about plus/minus 2 percentage points for CTC Job preparatory training and plus/minus 10 percentage points for DSB.

- Computer matches with Washington State ESD employment records and those of two other states (Idaho and Oregon) and federal employment records. These matches provide valuable information on employment and earnings outcomes. The data are incomplete, however, and employment rates among participants are underestimated. Such ESD records do not contain information on self-employment, and employment in states outside the Pacific Northwest is not included in this analysis.
- Computer matches with enrollment data from community and technical colleges and all public four-year institutions in the state, private career schools licensed by the Workforce Board, and apprenticeships overseen by the Department of Labor and Industries. These data underestimate postprogram enrollment rates; private four-year colleges and out-of-state schools are not included in the record matches.

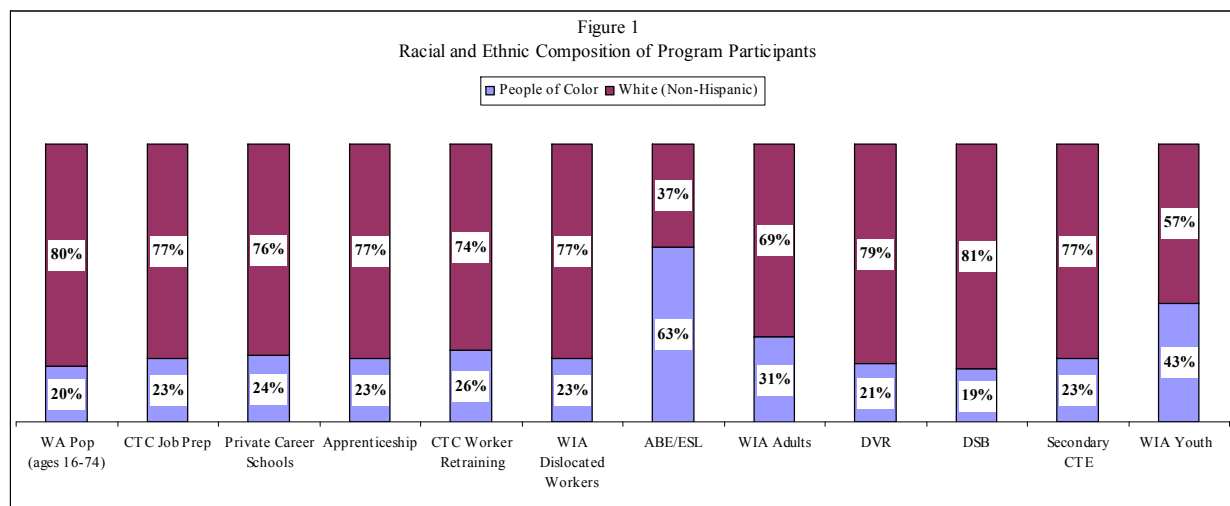
Except for secondary career and technical education, the participant results presented in this report are for all participants, not just those who completed their program. Participants are defined as individuals who entered a program and demonstrated the intent to complete a sequence of program activities. The number of participants who leave their program before completion affects program results.

Summary of Findings

Participant Characteristics

The demographic characteristics of program participants are an important factor in determining program results. Programs serving participants who have significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience, low levels of literacy, and other barriers to employment.

The racial and ethnic composition of participants in our workforce development programs were as, or more diverse, than similarly-aged populations in our state (Figure 1).²

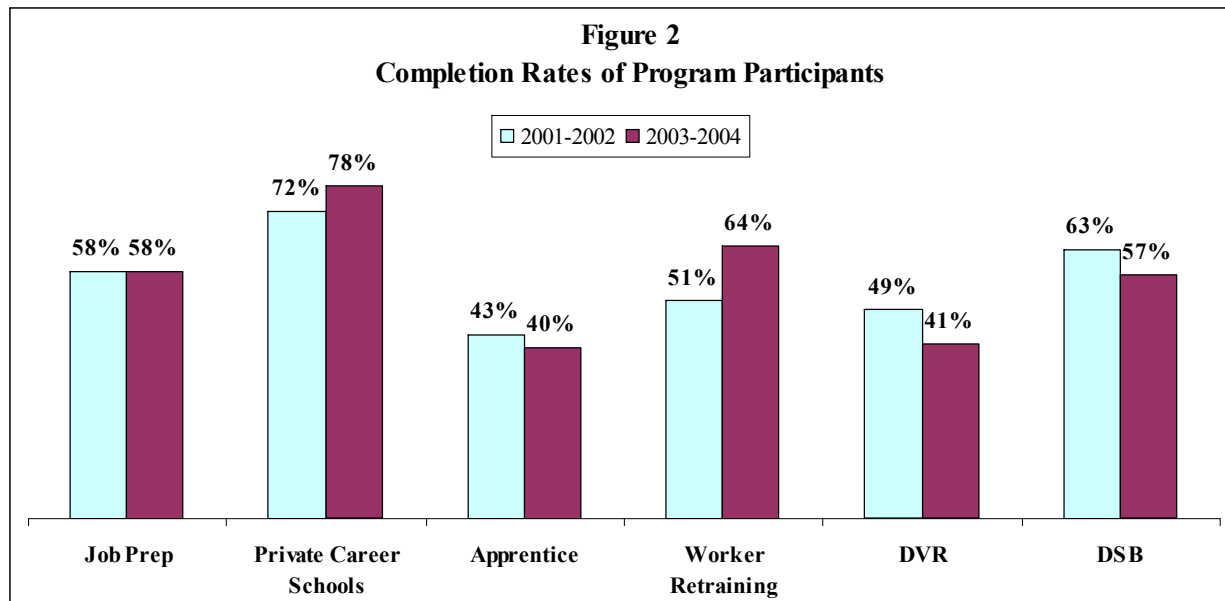


² The 2004 *Washington State Population Survey* was the source of data for the racial and ethnic background of the state's population.

Competency Gains

Desired Outcome: *Washington State's workforce possesses the skills and abilities required in the workplace.*

Participants in workforce development programs attain competencies by virtue of participating in their programs. In many programs, however, successful completion is the ultimate goal and typically results in certifications, degrees, or specified levels of competency. The 2003-2004 participants successfully completed their programs at levels similar to two years ago (Figure 2).³

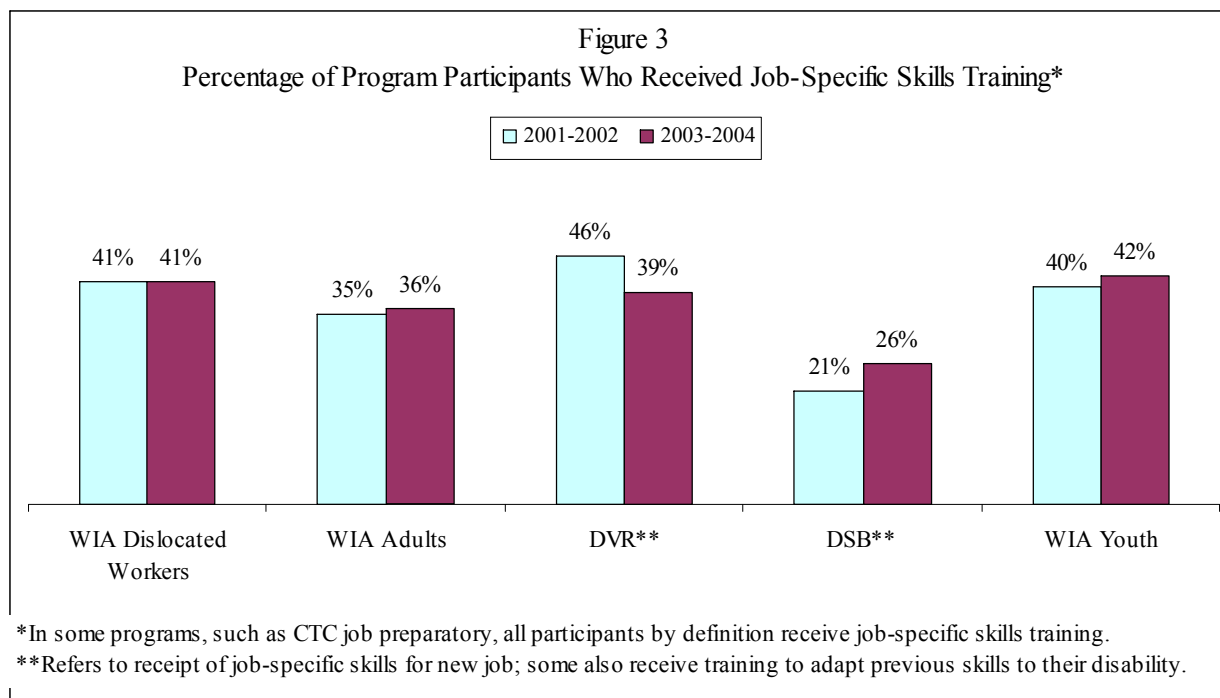


Workforce development is not limited to vocational training; it includes other services including assessments, counseling, and job search assistance. In five programs⁴ all participants, by definition, receive job-specific skills training. At the other extreme, none of the ABE/ESL students included in this study received vocational training.⁵ In the remaining six programs, survey results suggest that the proportion receiving job-specific skills training varied substantially (Figure 3).

³ Seven of the eleven programs included in this report document program completion. Six of those programs are included in Figure 2; all participants in secondary CTE programs were completers.

⁴ These include CTC Job Preparatory Training, Private Career Schools, Apprenticeship, CTC Worker Retraining, and secondary CTE programs.

⁵ This report is limited to adults who identified employment-related reasons for enrolling in ABE/ESL courses and who proceeded to take only basic skills courses. Individuals who took vocational courses in addition to basic skills are included in the analysis of community and technical college job preparatory training.



Among those leaving programs in 2003-2004, 39 percent of DVR clients and 26 percent of DSB clients said they received job-specific skills training for a new job. Note that many clients in these two programs also received training to adapt their previous job skills to their disabilities.⁶ Moreover, DVR and DSB offer other work-related services in addition to training; for example, some clients receive physical and mental restoration services, assistive technology, and communication services.

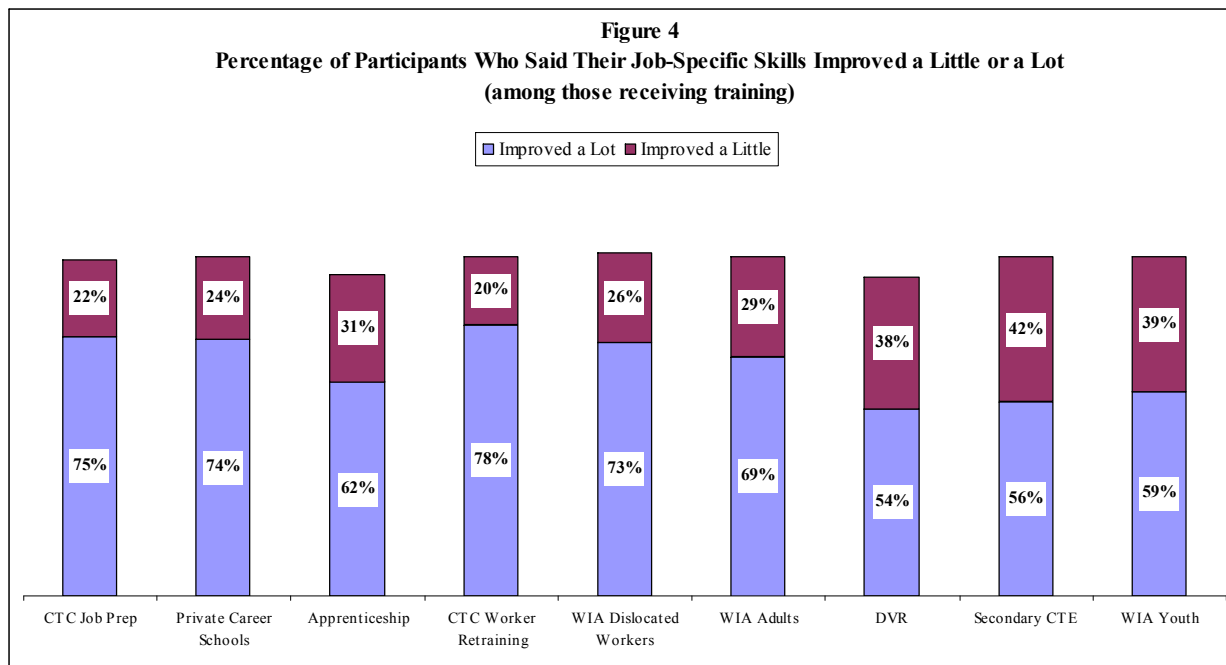
According to survey responses, 41 percent of WIA dislocated workers and 36 percent of WIA adults received job-specific skills training. (Administrative data may suggest that more received such training.)⁷

Among program participants who received job-specific skills training, almost all said their job-specific skills improved, and in most cases the participants said their skills improved a lot (Figure 4).⁸

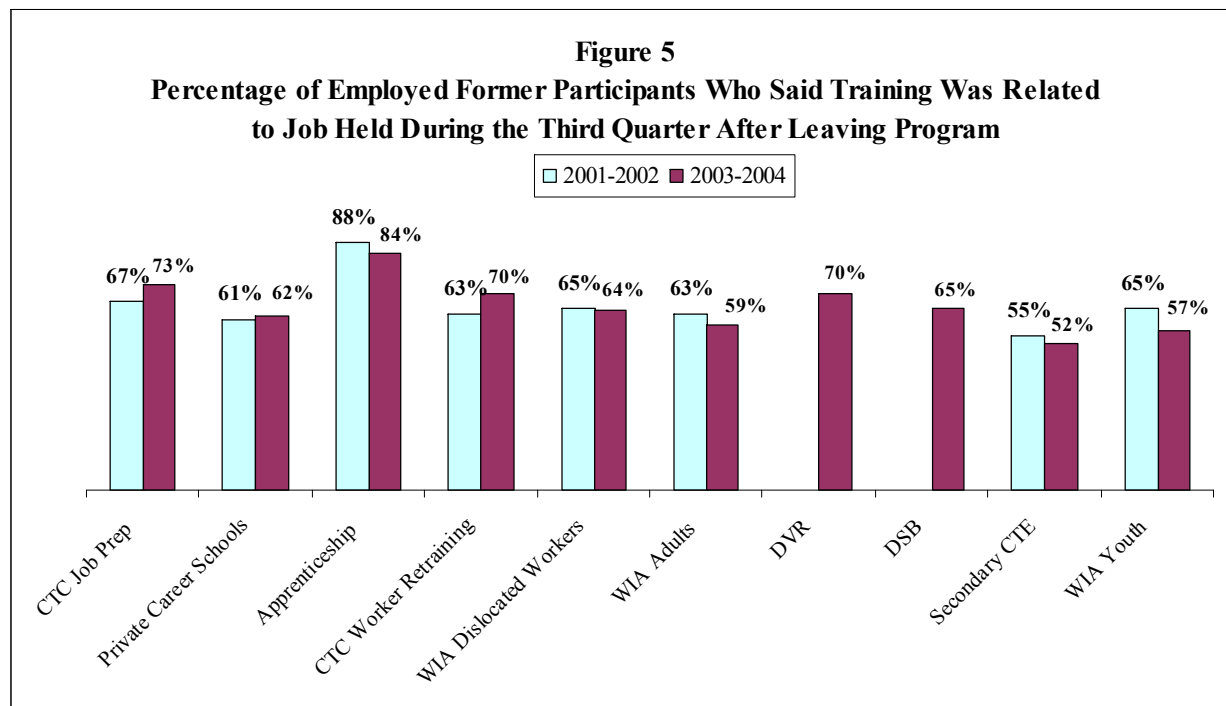
⁶ Among those leaving programs in 2003-2004, 24 percent of DVR clients and 30 percent of DSB clients reported receiving training in how to adapt previous skills to a disability.

⁷ According to administrative data, collected in the Service, Knowledge, and Information Exchange System (SKIES) reporting system, 64 percent of dislocated workers and 42 percent of WIA adults received “occupational skills training.” Occupational skills training in the administrative records data could include a wide range of services—occupational skills training, programs that combine workplace training with related instruction, training programs operated by the private sector, skill upgrading and retraining, entrepreneurial training, job readiness training, and customized training.

⁸ Information on skill improvement of DSB clients is not included in Figure 4 because the number receiving job-specific skills training was too small to determine reliable estimates.



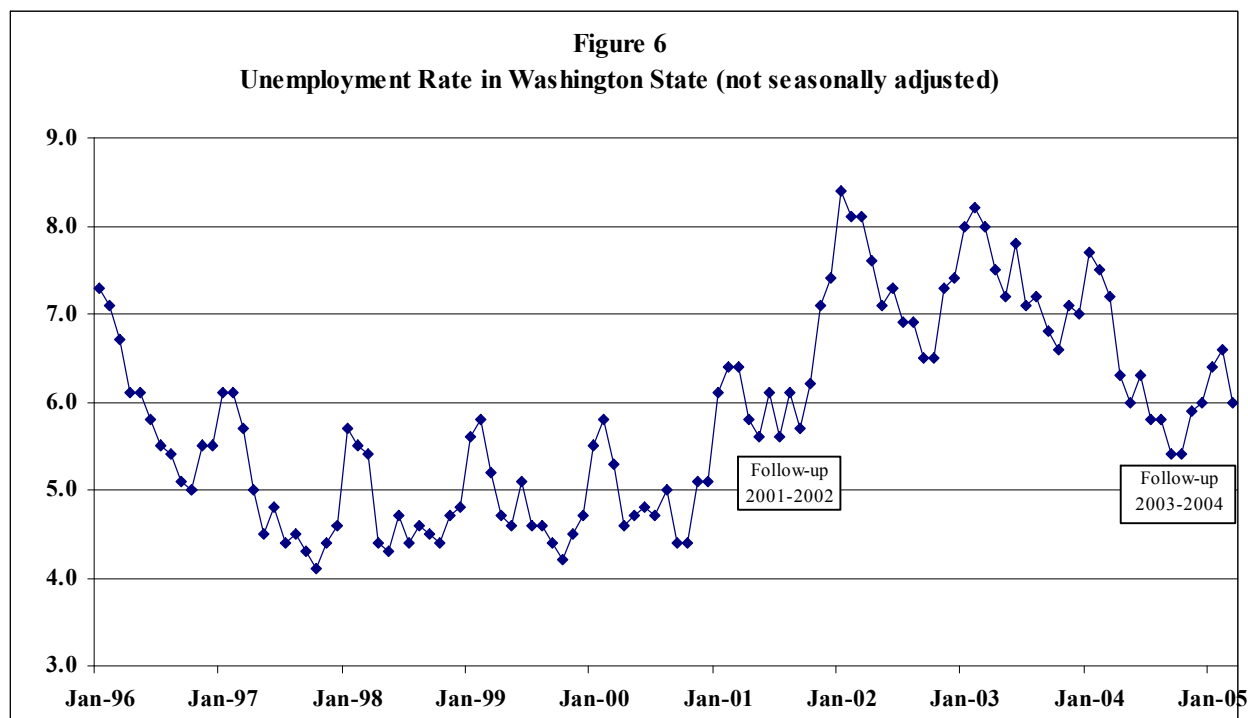
Another measure of whether training provided participants with the right skills is whether the participants believed their training was related to their postprogram employment (Figure 5). In all cases, a majority of program participants indicated their training was related to the job that they held during the third quarter after leaving the program. Compared to two years ago, CTC Job Preparatory and Worker Retraining participants were more likely to report that their training was related to their job; on the other hand, WIA youth were less likely to report a relationship.



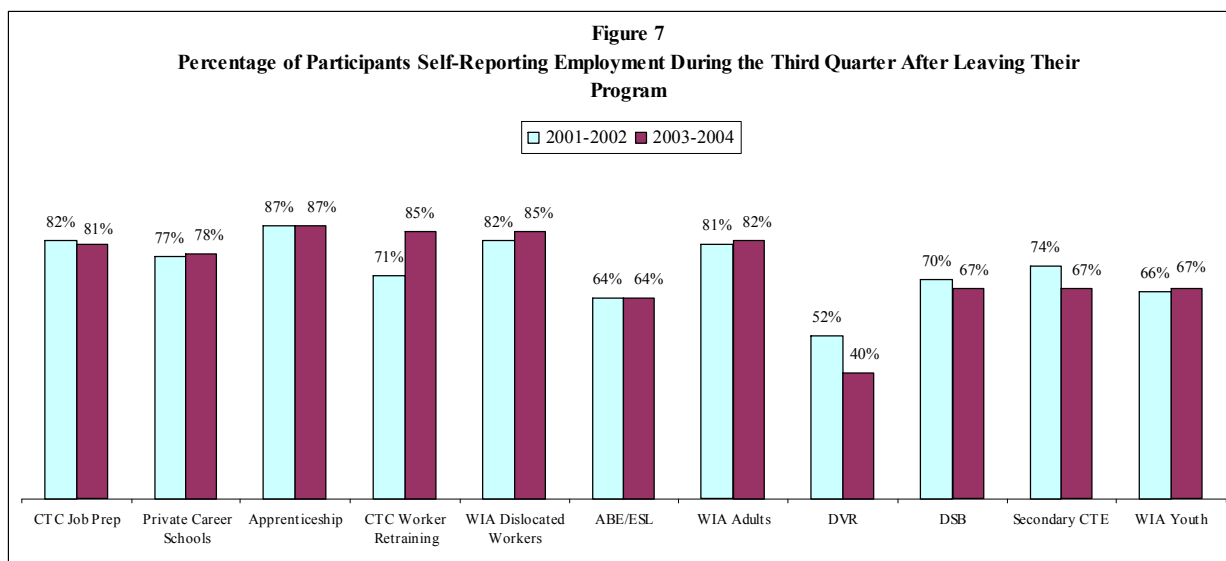
Employment

Desired Outcome: *Washington's workforce finds employment opportunities.*

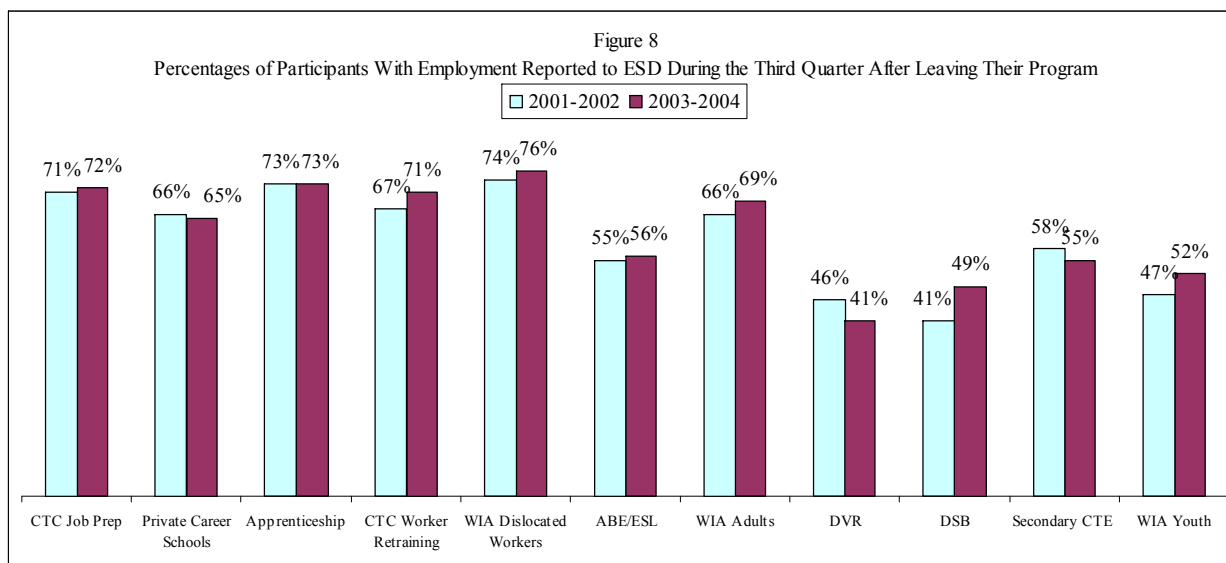
We evaluate the labor market outcomes of program participants by examining their employment and earnings during the third quarter after leaving a program. Participants leaving their program in 2003-2004 encountered an economy that was recovering well from the recession of 2001. The state's unemployment rate was on the decline (Figure 6).



Most program participants reported having a job during the third quarter (seven to nine months) after they left their program (Figure 7). Employment rates vary across programs. They are highest for programs serving adults and, as expected, are lower for programs serving youth, and lowest for programs serving adults with barriers to employment.



We used ESD records to examine changes in employment rates between participants who left programs during the 2001-2002 and 2003-2004 program years (Figure 8).⁹ Employment rates in most programs remained about the same or increased. Part of this increase may be due to the improving economy.



The adoption of order of selection continues to contribute to declines in reported employment among DVR clients. Since the end of 2000, when program funds and staff resources are insufficient to serve all eligible applicants, priority has been given to participants with the most significant disabilities. DVR clients leaving the program during 2001-2002 and continuing in 2003-2004, as a result of funding constraints and order of selection, tended to have more significant disabilities than do those in earlier cohorts.

⁹ Employment rates based on matches are lower than those based on survey results. ESD records do not contain information on self-employment. The estimates also exclude employment in states that are not included in our matching process.

Earnings

Desired Outcome: *Washington's workforce achieves a family-wage standard of living from earned income.*

Research has shown that postprogram earnings are very much affected by the characteristics of the participants who entered the program. Youth had the lowest postprogram hourly wages and quarterly earnings, and adults had the highest (Figure 9). Earnings and hourly wages were particularly high for individuals who participated in apprenticeship. In addition to the quality of the program, this finding reflects the length of the training and the labor market in their occupations and industries. Despite a stronger labor market compared to two years ago, earnings and wage changes were not always positive across programs.

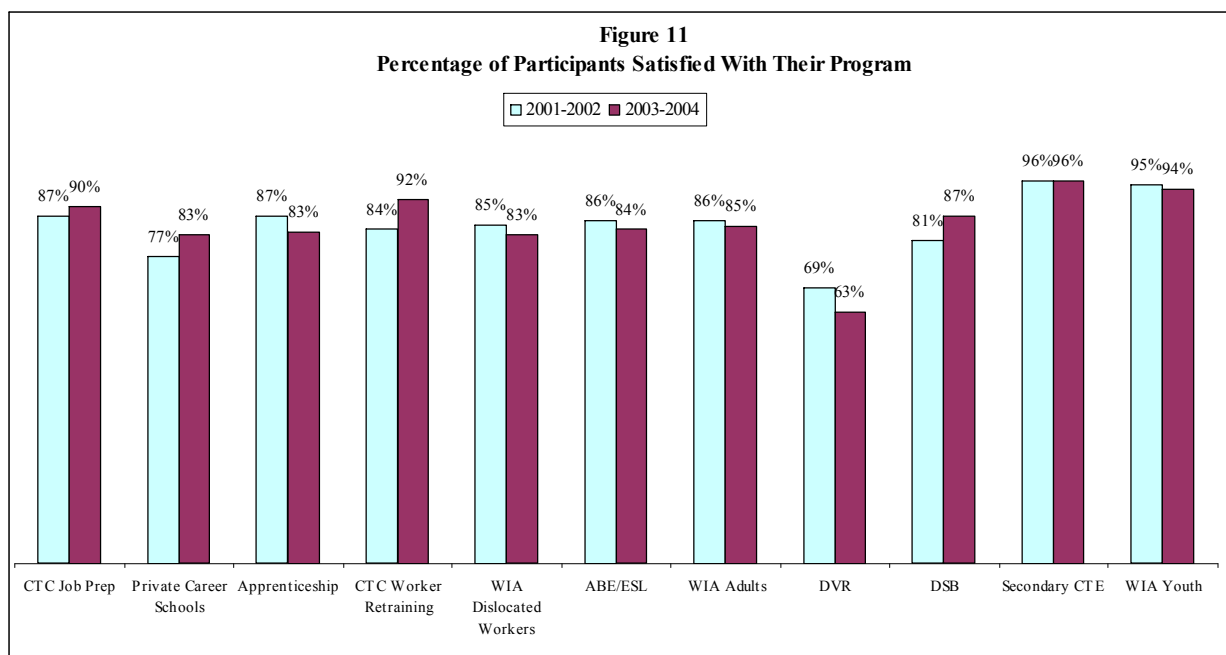
Figure 9
Median Hourly Wages and Annualized Earnings During the Third Quarter After Leaving Their Program*

		Hourly Wages of 2003-04 Participants	Annualized Earnings of 2003-04 Participants	Percentage Change from 2001-02	
				Hourly Wages	Earnings
Programs for Adults	CTC Job Preparatory	\$13.06	\$22,603	0%	1%
	Private Career Schools	\$11.64	\$18,849	-5%	-7%
	Apprenticeship	\$21.96	\$33,229	1%	2%
	CTC Worker Retraining	\$13.62	\$23,450	3%	4%
	WIA Dislocated Workers	\$14.82	\$27,929	3%	2%
Programs for Adults With Barriers	Adult Basic Skills	\$9.66	\$15,215	1%	-3%
	WIA Adults	\$10.93	\$18,352	1%	4%
	DVR	\$9.43	\$11,090	-9%	-14%
	DSB	\$12.68	\$21,762	-10%	5%
Programs for Youth	Secondary CTE	\$8.60	\$10,035	-3%	-2%
	WIA Youth**	\$8.41	\$9,775	-3%	-2%

*All wages and earnings are reported in 2005 quarter one dollars.

**Wages and earnings for WIA Youth are for those not enrolled in high school and for secondary CTE are for those not enrolled in higher education.

For most programs, postprogram earnings and hourly wages were lower for women than for men who participated in the same program (Figure 10). The especially large wage gap in apprenticeship is due to the concentration of women in relatively new apprenticeship programs that provide training outside the construction, precision, production, craft, and machinist trades. Among those leaving apprenticeships during 2003-2004, 49 percent of women (and virtually no men) left programs in early childhood education and teaching/library assistantship. Of those employed in the construction industries in the third quarter after leaving their apprenticeship program, males and females earned relatively the same wages.



Earnings were also lower for people with disabilities. Earnings were generally lower for people of color than for whites in seven of the eleven programs.¹⁰ These differences in postprogram wages and earnings by gender, disability status, and race/ethnicity generally reflect differences observed in the overall labor market.

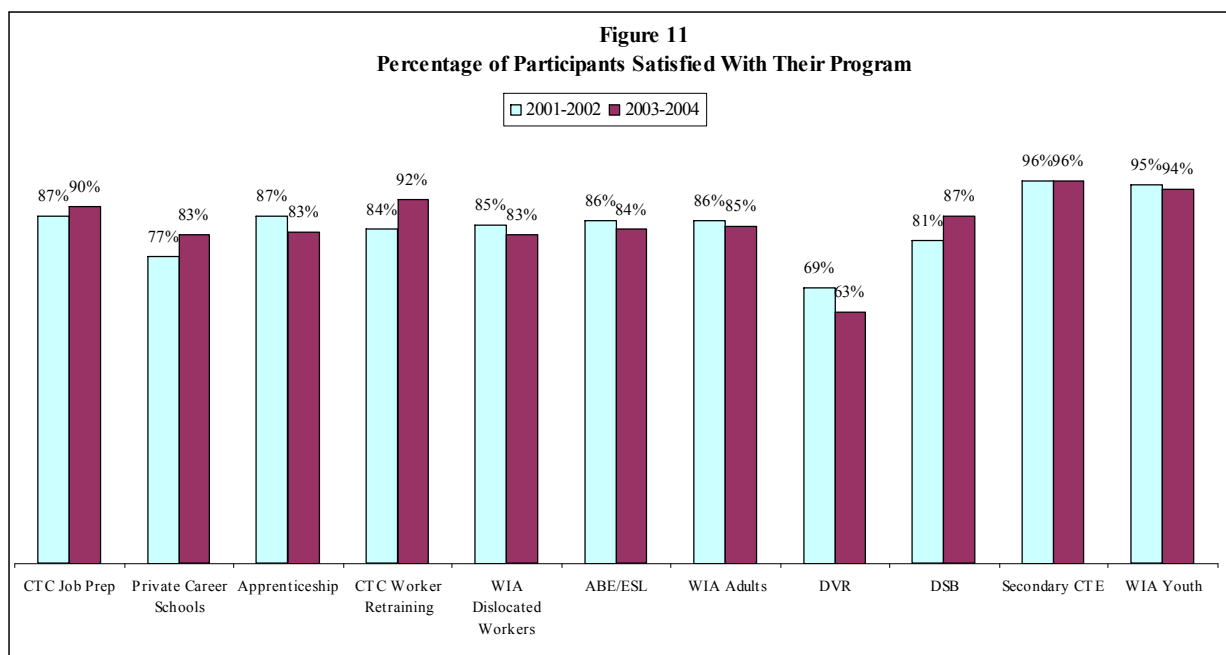
Participant Satisfaction

Desired Outcome: *Workforce development participants and their employers are satisfied with workforce development services and results.*

The vast majority of participants were satisfied with their program (Figure 11). Satisfaction levels—measured by averaging the percentage reporting that they met their educational objectives and the percentage satisfied with the overall quality of their programs—are high for all programs.¹¹ Reported levels of satisfaction increased among CTC Worker Retraining, DSB, and Private Career School participants and decreased among DVR and Apprenticeship participants. Satisfaction levels for other programs are similar to those reported by 2001-2002 participants.

¹⁰ No substantial racial/ethnic earnings differentials were observed for ABE/ESL and the WIA Youth program. Additionally, for the WIA Adult program, only African Americans had wages that were lower than whites. There were too few cases to examine racial differences in outcomes among DSB clients.

¹¹ The percentages reported for DVR and DSB are for overall satisfaction with program only.



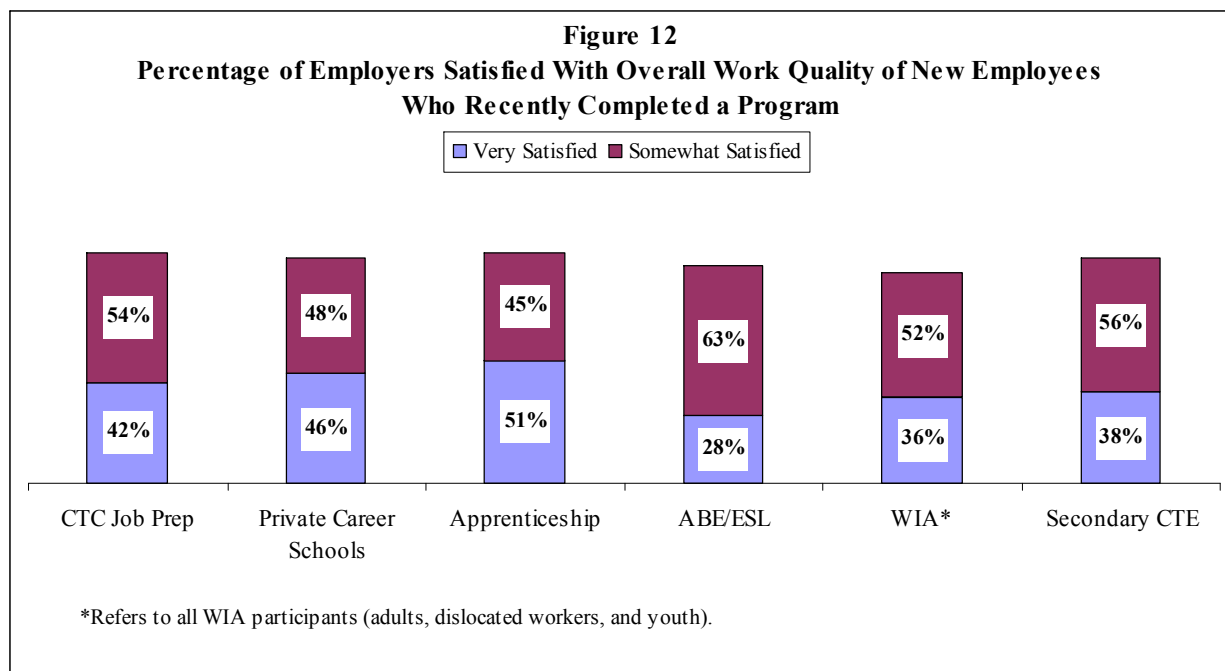
Although results vary by program, the aspect of programs that tends to have the lowest participant satisfaction was advice on selecting a training program. Most participants reported receiving the support services they needed while participating in their program. Many participants in several programs, however, reported an unmet need for information about job openings—program participants also have reported this unmet need in earlier evaluations.

Employer Satisfaction

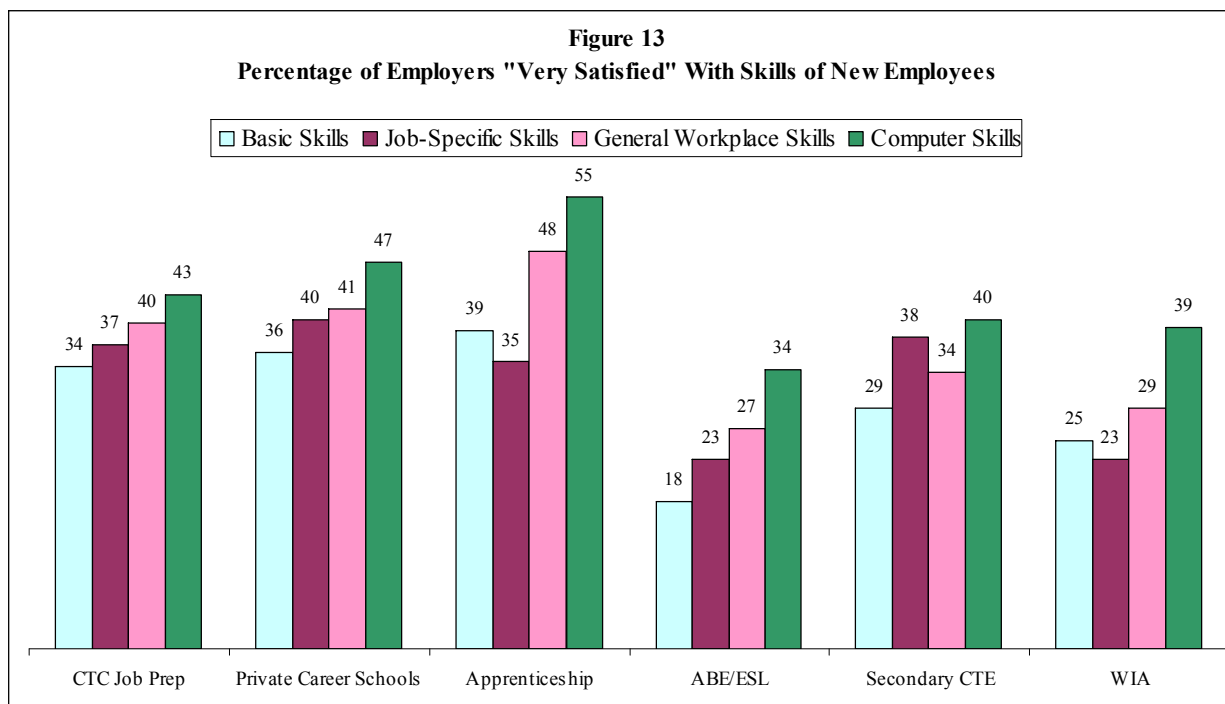
Desired Outcome: *Workforce development participants and their employers are satisfied with workforce development services and results.*

Employers were generally satisfied with the overall work quality of new employees who recently completed one of these programs (Figure 12).¹² Still, there is substantial room for improvement in the percentages of employers reporting they are “very satisfied” with the overall work quality of new hires.

¹² Employers were not questioned as to whether they hired recent participants of CTC Worker Retraining, DVR, or DSB programs. Therefore, those programs are not included in Figures 12 and 13.



In terms of being very satisfied, employers tended to rate the job-specific skills of new employees highly (Figure 13).¹³ Across programs, employers tended to be most satisfied with the computer skills of their new hires.



¹³ For basic skills and general workplace skills, the percentages "very satisfied" were averages across categories. Basic skills includes math, reading, and writing. General workplace skills includes teamwork, problem solving, communication, work habits, accepting supervision, and adaptability to change.

Community and Technical Colleges Job Preparatory Training

Washington State's 34 community and technical colleges offer job preparatory training that provides students with skills required for specific occupations. Job preparatory training does not include students who intend to transfer to a four-year college or university; students who enroll in a program to raise their basic skills to a high school level; or working adults who take a few classes to improve skills for their current jobs. While the Worker Retraining program at the community and technical colleges also provides occupational training, the results for students who participated in the Worker Retraining program are evaluated separately.

During the 2003-2004 school year, 30,335 job preparatory students completed or otherwise left the community or technical college system.¹⁴ These students comprise the job preparatory cohort included in this study. The median length of enrollment for these students was 12 months.

This study includes information from students' college enrollment records; ESD wage files from Washington, Idaho, and Oregon; and federal employment records. In addition, 1,853 students completed a telephone survey, providing additional data on employment and their satisfaction with the training.¹⁵ Employer satisfaction information was collected through a survey conducted during the summer of 2005; 423 firms that hired new employees who recently completed a job preparatory program responded to the survey.

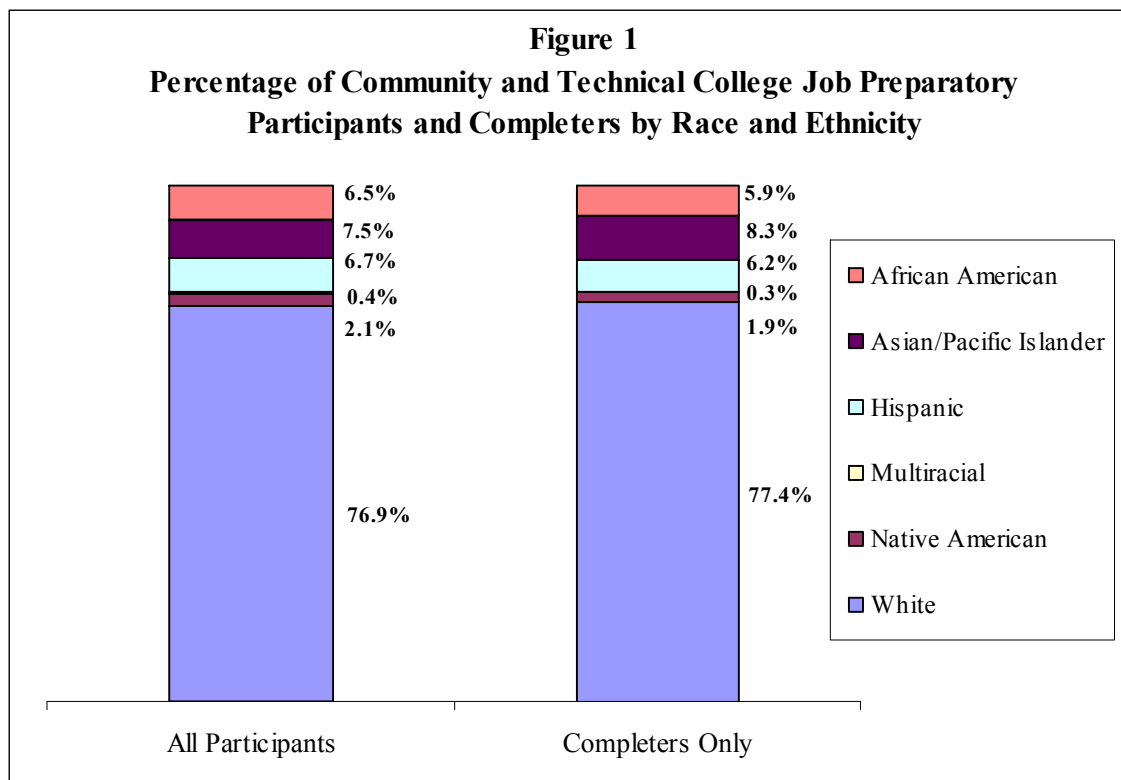
Participant Characteristics

Students from racial and ethnic minority backgrounds continued to be well represented among job preparatory students (Figure 1).¹⁶ They also made up a similar percentage of total program completers, although for particular subpopulations, completion rates were lower.

¹⁴ Job preparatory students identified themselves as vocational students and have either enrolled for six or more vocational credits or have completed three or more vocational credits. Additionally, the students included in this study exited their program during the 2003-2004 academic school year and did not enroll in a community or technical college for a period of one full year.

¹⁵ The responses to the participant survey were weighted to reflect the distribution of job preparatory students who left their program in 2003-2004 across Workforce Development Areas.

¹⁶ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



Of the 2003-2004 job preparatory students, 57 percent are women up from 55 percent in 2001-2002. Of the 2003-2004 completers, 59 percent are women.

When they enrolled, 53 percent of the students had not previously attended college; 24 percent had attended college without receiving a credential; 13 percent had a certificate or associate degree; and 10 percent had a baccalaureate or higher degree. The median age upon leaving training was 31—one quarter was under the age of 23, and another quarter was over age 42.

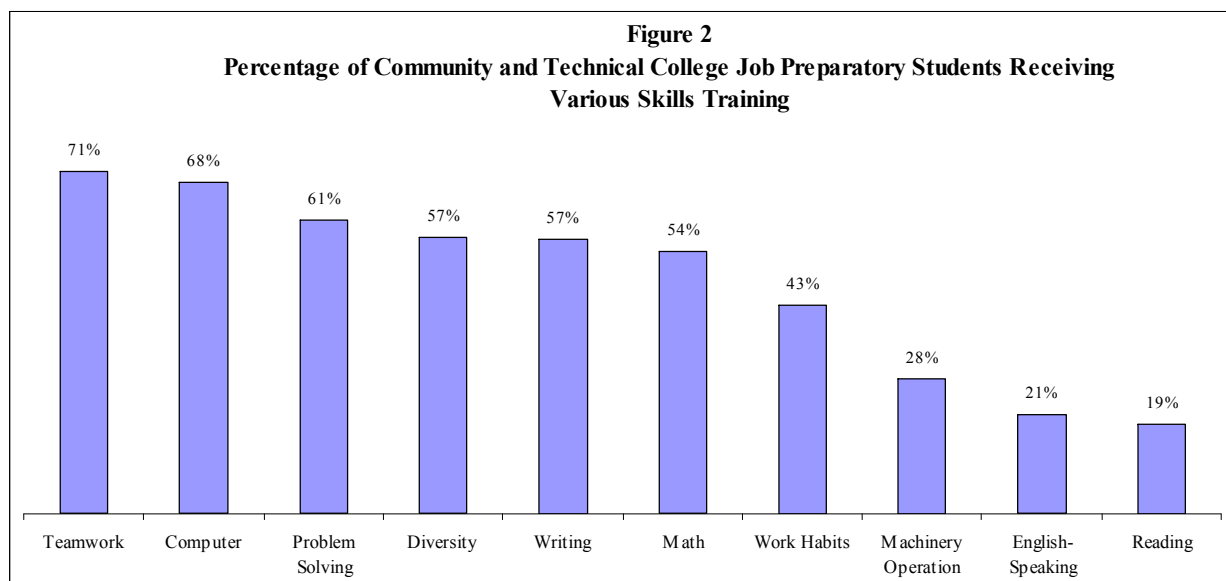
Competency Gains

Of job preparatory students, 58 percent completed their programs—18 percent received an associate degree, 18 percent received a vocational certificate, 13 percent were deemed ready for work because they completed 45 or more credits, and 10 percent completed a non-credit vocational program that lead to a certification.¹⁷ While a similar 58 percent of those leaving in 2001-02 completed their program, a lower percentage left with a certificate or degree—15 percent received an associate degree, 14 percent received a vocational certificate, 15 percent were deemed ready for work because they completed 45 or more credits, and 14 percent completed a non-credit vocational program that lead to a certification.

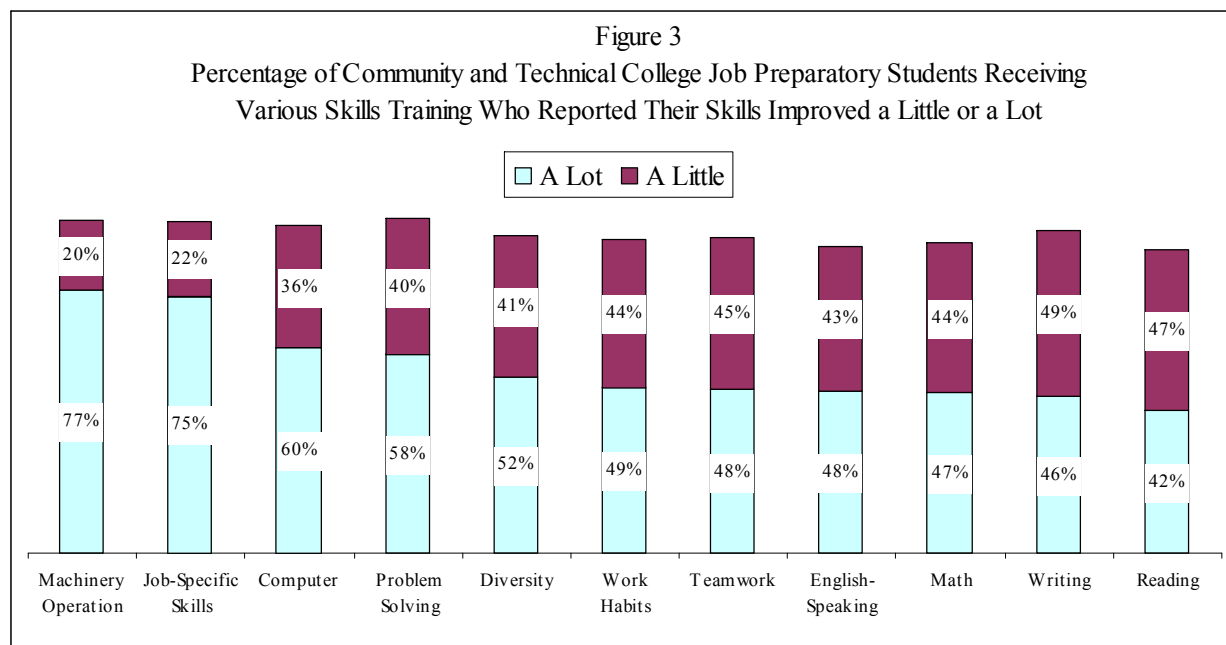
The primary goal of workforce training and education is to provide individuals with the skills and abilities required in the workplace. Job preparatory students appear to agree. Eighty-five percent of the 2003-2004 job preparatory students cited to “learn skills for a new job” as their most common reason for enrolling in college, which is similar to the 2001-2002 students. In

¹⁷ Upon exiting a college, the system determines whether the student is considered to have completed the program. The percentages do not sum to 58 percent due to rounding.

addition to learning job-specific skills, students also receive other types of training (Figure 2). In comparison to 2001-2002 students, those from 2003-2004 appear to have received a wider variety of skills training. Much higher percentages reported receiving training in teamwork, computer, writing, and diversity skills. A much lower percentage, however, reported receiving training in machinery operations.



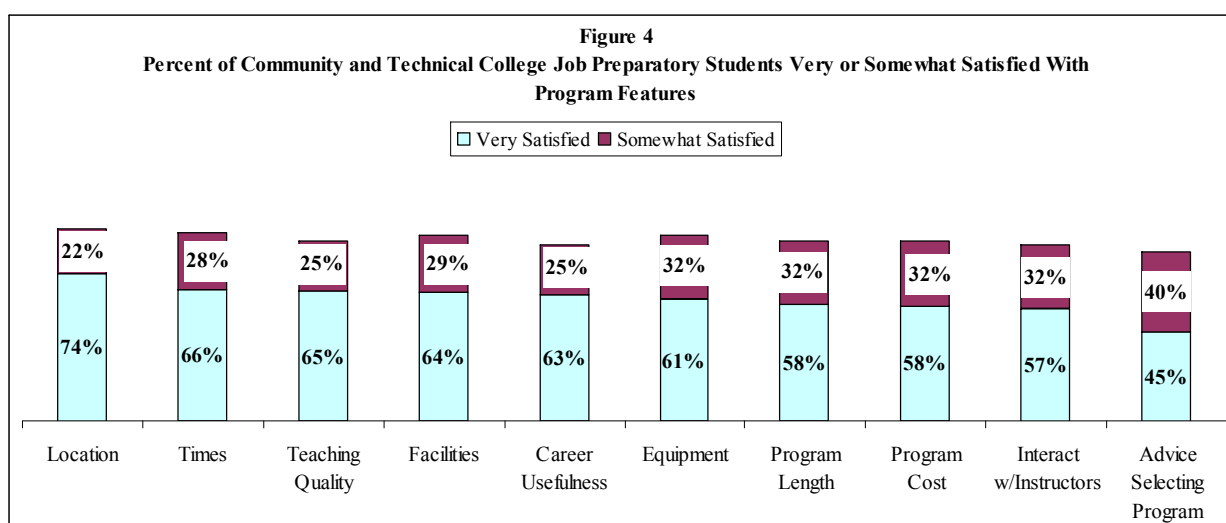
As in the previous study, most students reported their skills improved as a result of training, and higher percentages report substantial improvements in their technical skills than in their general workplace or basic academic skills (Figure 3). Across all skills training, higher or similar percentages of the 2003-2004 students reported their skills improved “a lot” compared to two years ago.



Among students employed seven to nine months after leaving the program, 73 percent reported their education and training was related to their job, up from the 67 percent two years ago.

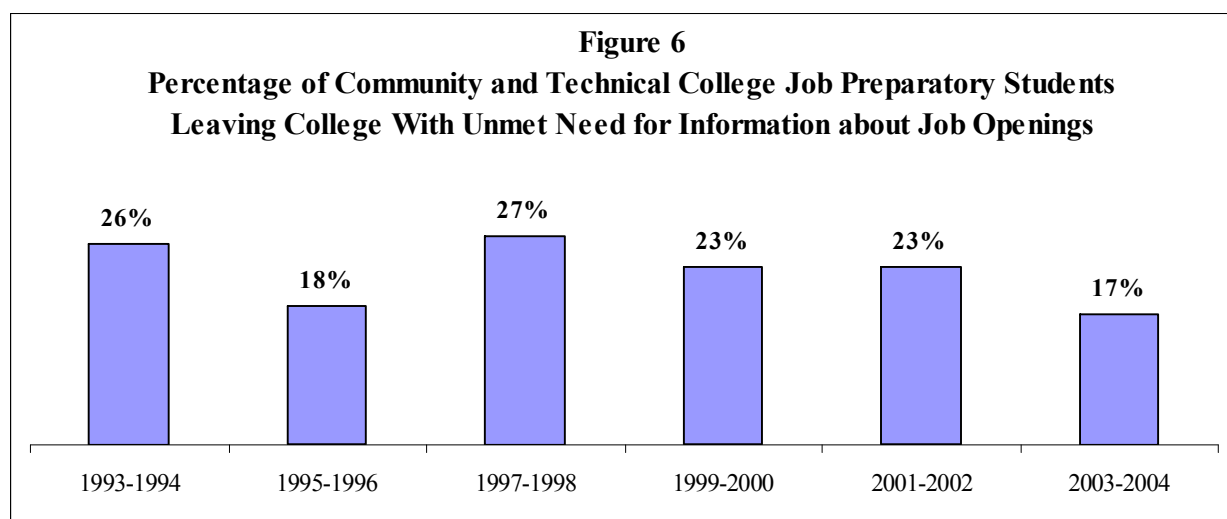
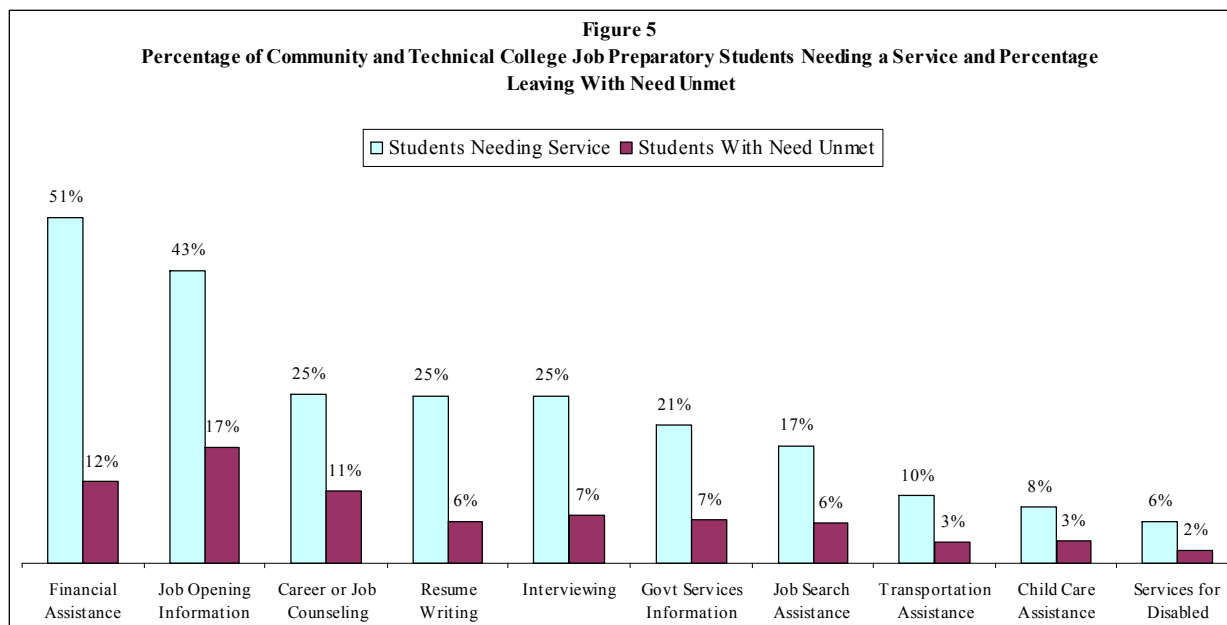
Participant Satisfaction

The 2003-2004 job preparatory students expressed similar high levels of satisfaction as in previous studies. Eighty-eight percent of students reported they had met their educational objectives. Ninety-one percent reported they were “very satisfied” or “somewhat satisfied” with the program as a whole. Students tended to be “very satisfied” with various features of their programs including location, times offered, quality of teaching, facilities, and usefulness of the program to their career (Figure 4). They were less satisfied with advice on selecting a training program.



Similar to previous studies, students indicated financial assistance and information about job openings as the support services they most needed while enrolled (Figure 5). Students tended to receive the support services they needed. The exception continues to be information about job openings; however, a smaller percentage of the 2003-2004 students compared to previous cohorts reported such an unmet need (Figure 6).¹⁸

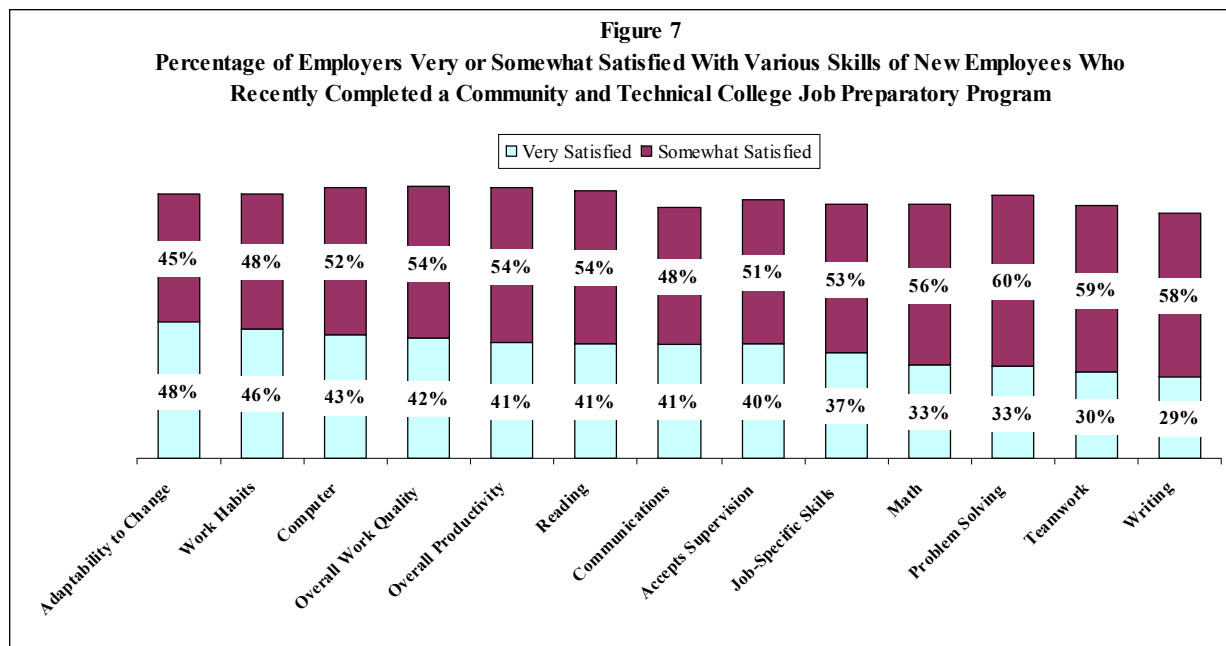
¹⁸ Those with unmet need include students who needed a service but either did not receive it or what they received did not meet their needs.



Employer Satisfaction

The Employer Satisfaction survey asked firms to evaluate new employees who had recently completed a vocational program at a community or technical college. Ninety-six percent of employers said they were either “somewhat satisfied” or “very satisfied” with the overall work quality of these new employees; this is virtually the same percentage as in the previous survey. While high percentages of employers in both surveys were satisfied with the various skills of their new employees, the percentages who were “very satisfied” were lower in this survey (Figure 7).

There are some differences in the skills satisfactory to employers. In the previous survey, firms tended to be “very satisfied” with the reading and job-specific skills of their new employees and less with problem-solving, math, adaptability to change, and writing. In this current survey, employers tended to be “very satisfied” with adaptability to change and work habits and less likely to be “very satisfied” with writing, teamwork, problem-solving, and math skills.



Employment and Earnings

According to the participant survey responses, 81 percent of job preparatory students were employed during the period seven to nine months after leaving their program (Figure 8).¹⁹ To find out more about the students' postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for UI purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

Record matches found 72 percent of the 2003-2004 students had reported employment during the third quarter after they left their program. Their median hourly wage²⁰ was \$13.06, and they had median annualized earnings of \$22,456. The median wage of job preparatory students is relatively high, but there is considerable variation in wages. While one quarter earned more than \$18.17 an hour, another quarter had jobs that paid less than \$9.88 an hour.

¹⁹ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

²⁰ All wages and earnings are stated in first quarter 2005 dollars.

Figure 8
Employment and Earnings of Community and Technical College Job Preparatory Students in the Third Quarter After Leaving Program

	1995-96	1997-98	1999-2000		2001-2002		2003-2004	
	All	All	All	Completers	All	Completers	All	Completers
Percentage self-reporting employment during third quarter after leaving program	86	83	86	na	82	na	81	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	62	73	74	77	71	74	72	75
Median quarterly hours worked, of those working	452	451	468	481	455	455	450	451
Percentage employed full-time (averaging 30 or more hours/week) of those working	63	65	66	68	62	64	62	63
Median annualized earnings of those working	\$19,348	\$21,642	\$23,278	\$25,078	\$22,235	\$23,192	\$22,456	\$23,486
Median annualized earnings of those working and not enrolled in further education		\$21,733	\$23,367	\$25,182	\$22,313	\$23,227	\$22,603	\$23,741
Size of household in which median earnings would support at poverty level	4.0	4.7	5.2	5.8	4.9	5.2	5.0	5.3
Size of household in which median earnings would support at twice poverty level	1.0	1.4	1.6	1.9	1.5	1.6	1.5	1.7
Median hourly wage of those working	\$11.32	\$12.18	\$13.16	\$13.70	\$13.01	\$13.33	\$13.06	\$13.37
Percentage self-reporting receipt of medical benefits from employer	67	65	68	na	71	na	66	na
Percentage self-reporting receipt of pension benefits from employer	44	43	46	na	48	na	48	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.								

Employment among job preparatory students is concentrated in the services, retail trade, public administration, and manufacturing industries (Figure 9). Compared to employment of the 2001-2002 cohort, much higher percentages of those from 2003-2004 were employed in the education services, health care services, and public administration industries, and much lower percentages were employed in manufacturing and retail trade industries.

Figure 9 Industry of Employment of Job Preparatory Students in the Third Quarter After Leaving Program: 2003-2004	
Industry Group	Employment
Natural Resources and Mining	1.0%
Construction	3.8%
Manufacturing	7.2%
Aerospace	1.6%
All Other Manufacturing	5.6%
Wholesale Trade	2.7%
Retail Trade	12.4%
Transportation and Warehousing and Utilities	3.0%
Information	1.9%
Financial Activities	5.1%
Services	53.4%
Professional, Scientific, and Technical Services	4.1%
Administrative and Support and Waste Management and Remediation	7.4%
Education Services	6.1%
Health Care	19.1%
Social Assistance	4.0%
Arts, Entertainment, and Recreation	1.7%
Accommodation and Food Services	6.5%
All Other Services	4.6%
Public Administration	9.3%
Correctional Facilities	4.3%
All Other Public Administration	5.1%
TOTAL	100%
Note: Industry groups are based on North American Industry Classification System codes. Subgroup percentages do not always sum to major group percentage due to rounding.	

Employment and earnings varied by gender, race and ethnicity, and disability status. Female and male students were equally likely to be employed in the third quarter after leaving their programs. Among those with employment, however, the median earnings for female students was 79 percent of males; their median hourly wage was 91 percent of males. One reason for the earnings gap is that women were less likely to be employed full-time (58 percent versus 67 percent). Another reason is women and men choose to enroll in different types of programs. Although women do enroll in high-wage programs—they account for 9 out of every 10 students in associate degree nursing and dental hygienist programs—many more enroll in programs that pay relatively low wages. Over one-third of the women were enrolled in six relatively low-wage programs: administrative support, early childhood education, nursing assistants, social services, cosmetology, and teaching/library assistants. Only 6 percent of male students were enrolled in these programs.

African Americans and Native Americans were less likely than whites to be employed in the third quarter after leaving their programs. Of those employed, the median earnings for Native Americans was 86 percent of whites, for African Americans it was 87 percent, and for Hispanics it was 88 percent. Compare to white students, Native American, African American, and Hispanic students are less likely to have enrolled in higher wage programs.

Employment outcomes and earnings also varied by disability status. College records indicate 7 percent of the students included in this study had a disability. These students were less likely to have employment during the third quarter after exit (51 percent versus 71 percent). They were also less likely to work full-time (52 percent versus 62 percent). Among those working, the median hourly wage rate of those with a disability was 83 percent of those without a disability, and their median earnings were 71 percent of those with no reported disability.

Areas for Improvement

The large majority of students were satisfied with their college training program. Most students obtained jobs that paid a decent wage. Most students received the support services they needed while enrolled. Many students, however, continue to report they left their programs with their need for information on job openings unmet.

Despite the fact that slightly higher percentages of students earned degrees or certificates compared to two years ago, the completion rate remains at 58 percent. Colleges should strive to increase the rates of successful completions.

The colleges might do more to eliminate gender and racial-ethnic differences in the labor market outcomes. Efforts to recruit women and minorities into higher wage programs should continue and may be facilitated by enhanced assistance in selecting a training program, another area of need. There should also be efforts to improve labor market outcomes for students with disabilities.

The median age of job preparatory students remains high. Colleges should continue efforts to increase enrollments in job preparatory programs among young people.

Private Career Schools

Private career schools are independent businesses that provide students with training in a variety of occupations. No public funds are appropriated for private schools, but eligible students may:

1. Obtain federal grants and loans to pay for educational expenses if the school they choose has been authorized to participate in federal student aid programs.
2. Secure funding under the state's Worker Retraining program.
3. Use "Individual Training Account" vouchers, funded under WIA Title I-B.

There are roughly 351 private career schools in Washington State. The Workforce Board licenses 254 certificate-granting vocational institutions. The Higher Education Coordinating Board authorizes 17 private schools that grant associate degrees (10 of which also grant baccalaureate degrees). The state's 80 cosmetology schools are regulated by the Department of Licensing. Only the schools licensed by the Workforce Board are included in this study.

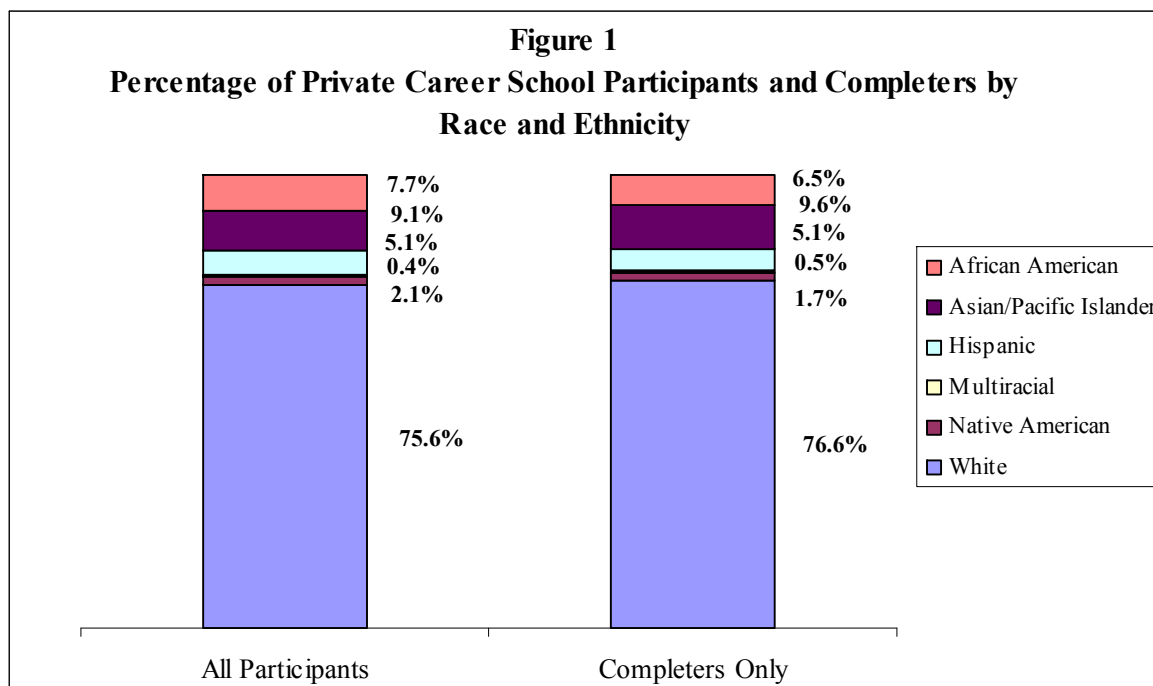
This study is based on information from 183 certificate-granting schools that are licensed by the Workforce Board and reported sufficient data. Program records were collected on 17,099 students who left programs during the 2003-2004 school year.²¹ The median length of enrollment for these students was four months. However, the lengths of private career school programs vary widely, and in 2003-2004, one quarter of the students had enrollment lengths greater than ten months, while another quarter had enrollment lengths of less than one month.

The study includes information from students' enrollment records; ESD wage files from Washington, Idaho, and Oregon; and federal employment records. In addition, 203 students completed a telephone survey, providing additional data on employment and their satisfaction with the training. Employer satisfaction information was obtained through a survey administered during the summer of 2005; 316 firms that hired new employees who recently completed a private career school program responded to the survey.

²¹ These data do not provide full coverage of the private career school sector. However, coverage is improving. The evaluation for 2001-2002, for example, was based on records for 16,543 students from 170 schools. In 2003-2004, there were 234 Workforce Board licensed private career schools. Of those not included in this study, 23 were new schools or school under new management and, therefore, had not exiters in 2003-2004; 14 were existing schools that had not exiters in 2003-2004; and 9 schools provided no data or insufficient data to be included in this study.

Participant Characteristics

Students of color continue to be well represented among private career school students (Figure 1).²² The percentage of students from African American backgrounds was particularly noteworthy; African Americans accounted for nearly 8 percent of the students, but they represent only 3 percent of the state's population (ages 15-74). In general, the racial and ethnic make-up of those who successfully completed their private career school program mirrors the distribution of all private career school students who left the program in 2003-2004.



Of the 2003-2004 private career school cohort, 56 percent were women, up from 51 percent in 2001-2002. Of the completers, 55 percent were women.

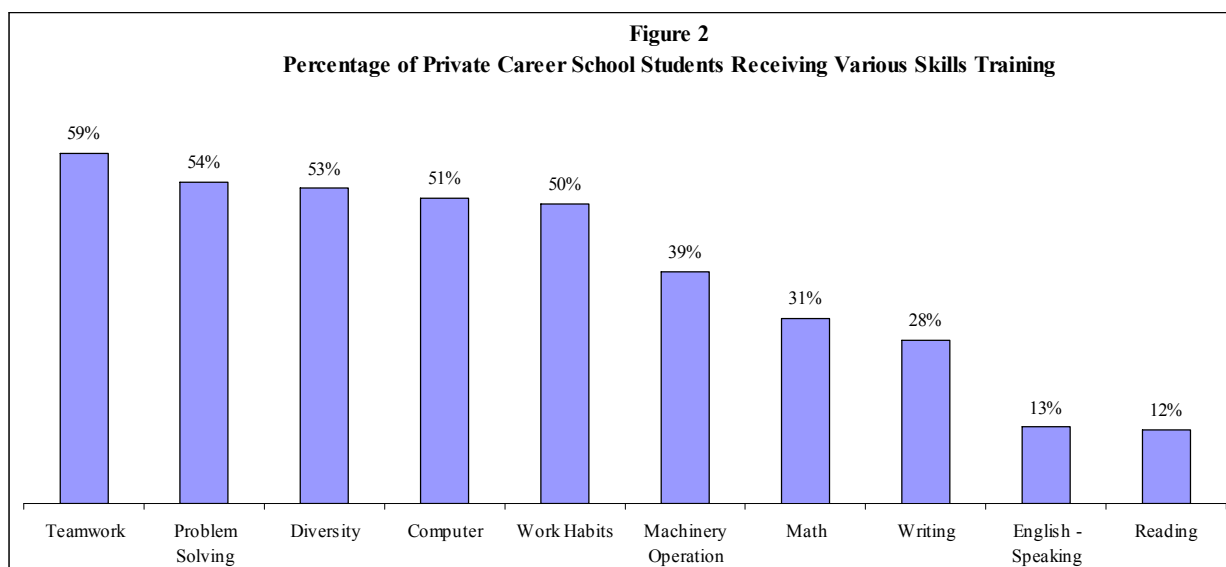
The typical (median) student was age 28 when enrolled; one quarter was under the age of 22 and another quarter was over 40. When they enrolled, 72 percent had not previously attended college; 15 percent had attended college without receiving a credential; 7 percent had a certificate or associate's degree; and 6 percent had a baccalaureate or higher degree.

²² In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.

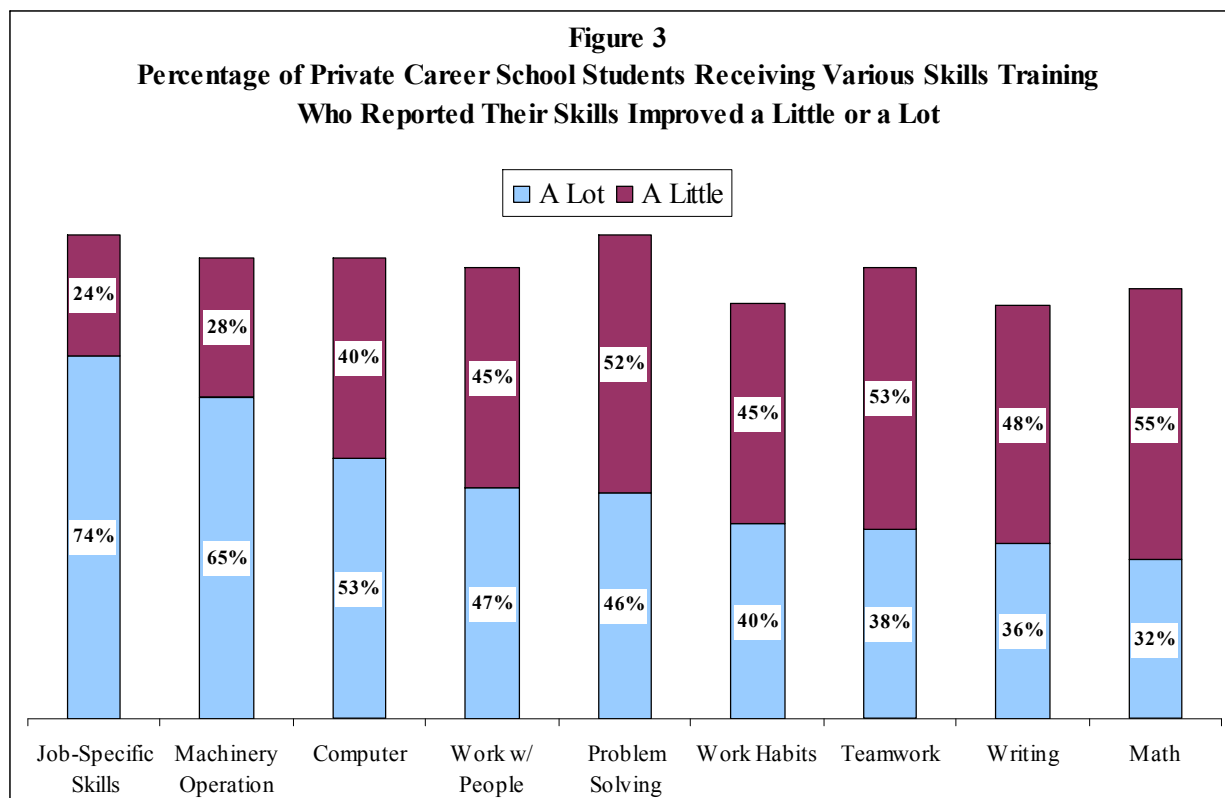
Competency Gains

Of the students who left private career schools in 2003-2004, 78 percent had completed their program; this percentage was up from the 72 percent of those leaving in 2001-2002 who had completed their programs.

According to the survey results, 90 percent of students indicated they entered a private career school to learn skills for a new job; the same percentage that so indicated two years ago. In addition to job specific skills, students received other types of training (Figure 2). As in previous studies, the majority of students also received training in computer and workplace skills. Fewer, however, received training in machinery operation and basic skills.



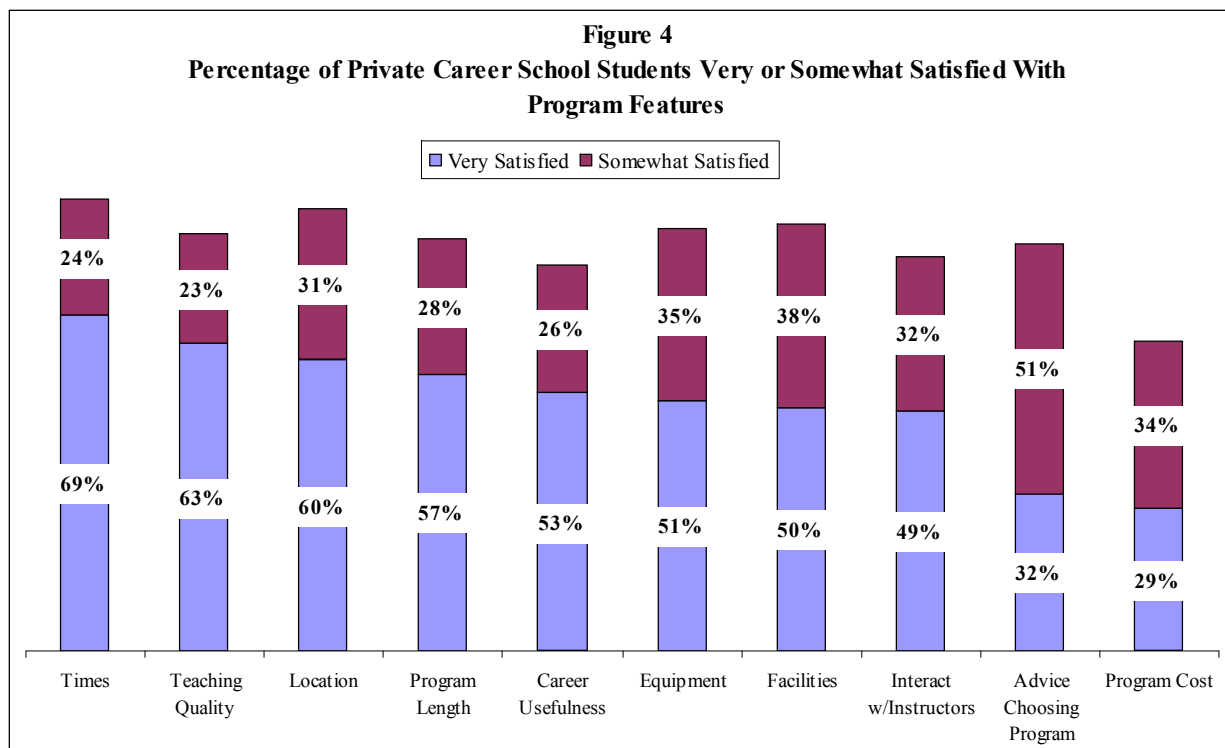
For both 2001-2002 and 2003-2004, students tended to report their skills improved as a result of training. Students were more likely to report “a lot” of improvement in technical skills, such as job specific skills and machinery operations, and less likely to report “a lot” of improvement in workplace skills, such as teamwork and work habits and in basic skills (Figure 3). A much higher percentage of the 2003-2004 students reported “a lot” of improvement in job specific skills (74 percent versus 66 percent).



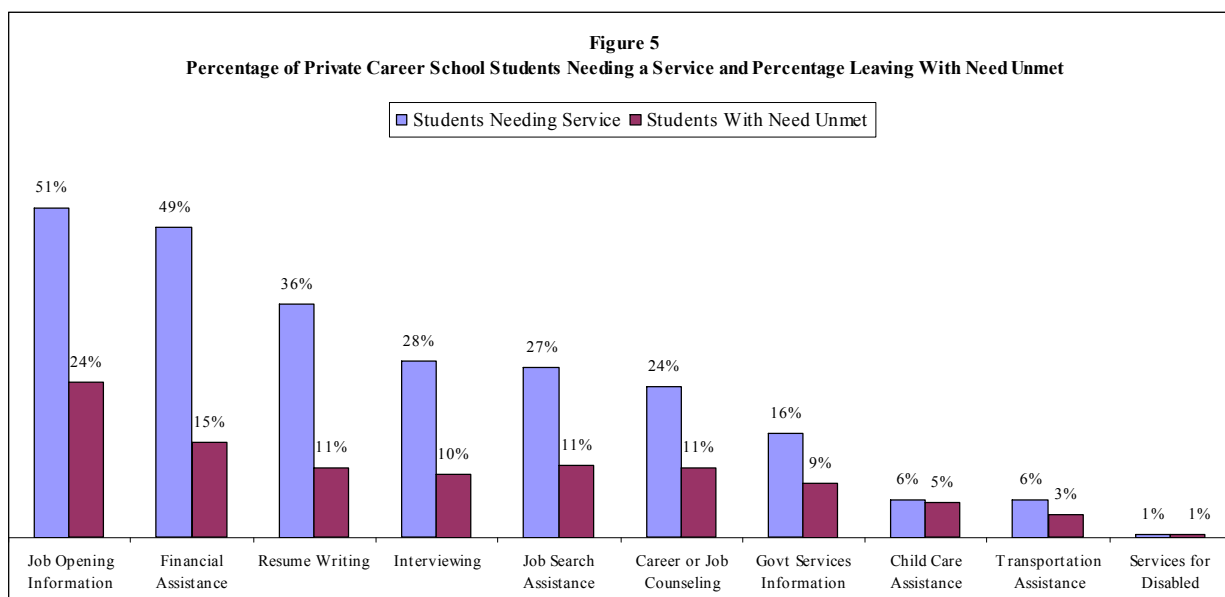
Among those employed after training, 62 percent stated their job was related to the training they received; virtually the same percentage as reported by the 2001-2002 students.

Participant Satisfaction

The 2003-2004 students reported higher levels of satisfaction with their programs than the 2001-2002 students. Eighty-four percent reported they had met their educational objectives compared to seventy-eight percent reported two years ago. Eighty-one percent indicated they were “very satisfied” or “somewhat satisfied” with their program as a whole; two years ago, seventy-five percent reported this level of satisfaction. When asked about specific program features, satisfaction tended to be highest with times and the quality of teaching. Satisfaction tended to be lower with the program cost and advice on selecting a program (Figure 4).

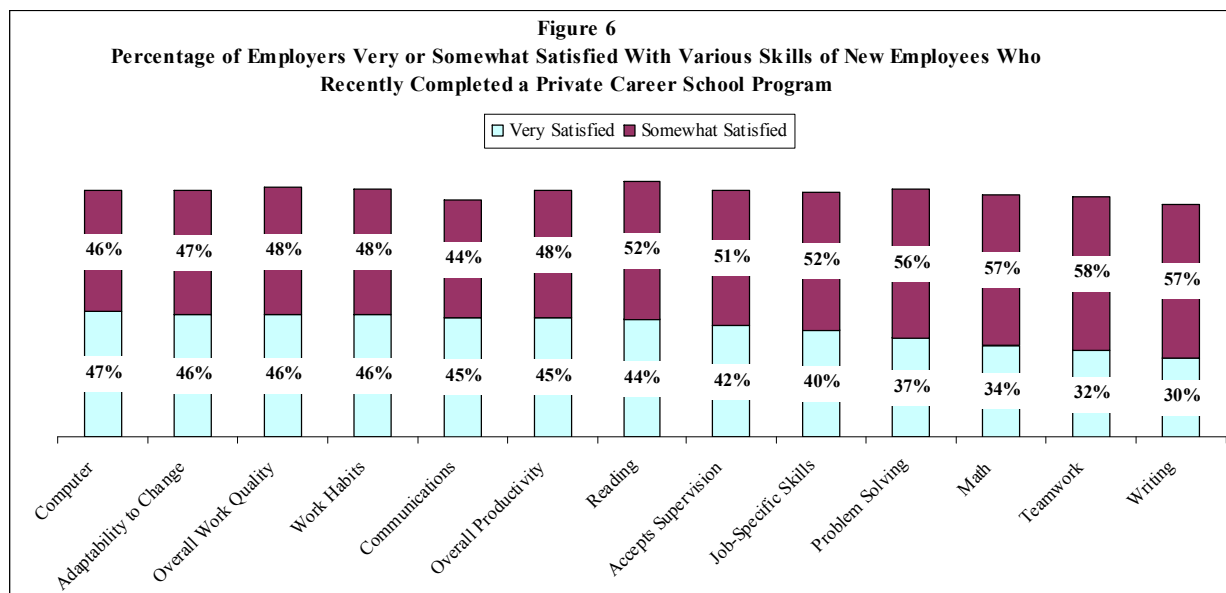


Similar to previous studies, students cited information about job openings and financial assistance as support services most needed while enrolled (Figure 5). In most cases, services needed were provided. Unfortunately, nearly one-fourth of students reported their need for information about job openings was not met; however, this was lower than the one-third two years ago.



Employer Satisfaction

The Employer Satisfaction survey asked firms to evaluate new employees who had recently completed a program at a private career school. Ninety-four percent said they were either “somewhat satisfied” or “very satisfied” with the overall work quality of these new employees; slightly less than the ninety-eight percent who so indicated in the previous survey (Figure 6). Compared to two years ago, much lower percentages of employers were “very satisfied” with new employees’ teamwork, acceptance of supervision, and job-specific skills.



Employment and Earnings

According to survey responses, 78 percent of the 2003-2004 students were employed during the period seven to nine months after leaving their program (Figure 7).²³ To find out more about the students’ postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain information on only those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active military duty, and those working for religious, nonprofit organizations are the major groups not included).

Record matches found 65 percent of the 2003-2004 private career school cohort had reported employment during the third quarter after they left their program. Their median hourly wage²⁴ was \$11.64, and they had median annualized earnings of \$18,849.

²³ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

²⁴ All wages and earnings are stated in first quarter 2005 dollars.

Figure 7
Employment and Earnings of Private Career School Students in the Third Quarter After Leaving Program

	1997-98	1999-2000		2001-2002		2003-2004	
	All	All	Completers	All	Completers	All	Completers
Percentage self-reporting employment during third quarter after leaving program	87	87	na	77	na	78	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	72	69	70	66	68	65	67
Median quarterly hours worked of those working	448	450	463	428	443	428	439
Percentage employed full-time (averaging 30 or more hours/week) of those working	56	60	63	57	60	56	59
Median annualized earnings of those working	\$17,655	\$20,785	\$22,116	\$20,249	\$21,715	\$18,849	\$19,905
Size of household in which median earnings would support at poverty level	3.5	4.4	4.8	4.3	4.7	3.8	4.2
Size of household in which median earnings would support at twice poverty level	0.9	1.3	1.5	1.2	1.4	1.0	1.1
Median hourly wage of those working	\$10.08	\$12.07	\$12.45	\$12.20	\$12.65	\$11.64	\$11.99
Percentage self-reporting receipt of medical benefits from employer	68	71	na	64	na	58	na
Percentage self-reporting receipt of pension benefits from employer	33	39	na	36	na	30	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.							

Compared to noncompleters, program completers were slightly more likely to be employed and working full-time. Noncompleters had a median wage that was about 85 percent of completers.

As in the previous study, employment among private career school students is concentrated in services, especially health services and retail trade industries (Figure 8). Compared to two years ago, those leaving their programs in 2003-2004 were more likely to be in services and less likely to be in retail trade industries.

Figure 8 Industry of Employment of Private Career School Students in the Third Quarter After Leaving Program: 2003-2004	
Industry Group	Employment
Natural Resources and Mining	1.9%
Construction	4.3%
Manufacturing	6.8%
Aerospace	1.5%
All Other Manufacturing	5.3%
Wholesale Trade	3.4%
Retail Trade	13.7%
Transportation and Warehousing and Utilities	7.9%
Trucking	4.0%
All Other Transportation and Warehousing and Utilities	3.9%
Information	2.0%
Financial Activities	4.6%
Services	55.6%
Professional, Scientific and Technical Services	3.0%
Administrative and Support and Waste Management and Remediation Services	10.7%
Education Services	2.7%
Health Care	19.8%
Social Assistance	2.4%
Arts, Entertainment, Recreation	2.6%
Accommodation and Food Services	9.7%
All Other Services	4.7%
Public Administration	1.6%
Total	100%

Employment and earnings varied by gender, race and ethnicity, and disability status. Female and male students were equally likely to be employed in the third quarter after leaving their programs. Females, however, were less likely to be employed full-time (52 percent compared to 61 percent) and among those employed, the median hourly wage was 86 percent of males.

Native American students were less likely than white students to be employed in the third quarter after leaving their programs (57 percent versus 66 percent). Asians, Pacific Islanders, and Hispanics were more likely to be employed full-time compared to whites (52 percent, 61 percent, and 55 percent, respectively). African Americans had a median wage that was 90 percent of whites, Hispanics and Native Americans had median wages that was about 94 percent of whites, and Asians and Pacific Islanders had median wages that was 96 percent of whites.

Employment outcomes and earnings also varied by disability status. College records indicate that about 2 percent of the students included in this study had a disability. Compared to students without disabilities, students with disabilities were less likely to have reported employment during the third quarter after exit (49 percent versus 65 percent). However, they were as likely to be working full-time and have a similar median wage.

Areas for Improvement

The majority of private career school students reported they were satisfied with their training, they were employed, their training was related to their jobs, and their job-specific skills increased a lot. Access to needed support services while enrolled was generally high.

There are, however, some areas for improvement. Despite the fact that the state's economy had started to improve, there continued to be declines in postprogram employment and earnings.²⁵ Although improved since the last survey, one-fourth of the students left the schools with an unmet need for information on job openings. The wages of students differ by gender and race-ethnicity. Women earn less than men, and students from racial and ethnic minority backgrounds earn less than whites. Efforts should be made to recruit women and minorities into higher wage programs.

²⁵ When interpreting private career school trend data, it is important to keep in mind that this sector, more than any other, has a changing institution composition over time. That is, existing entities are more likely to leave the sector and new entities are more likely to enter the sector over time than, for example, the community and technical college sector or the WIA Workforce Development Area sectors.

Apprenticeship

Apprenticeship in Washington is governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries. Apprenticeship combines classroom studies with extensive on-the-job training under the supervision of a journey-level craft person or trade professional. Apprentices receive wages, health, pension, and other benefits while learning occupational skills. Apprenticeships require applicants be at least 16 years old (18 for construction trades), and most require at least a high school diploma or GED for entrance.

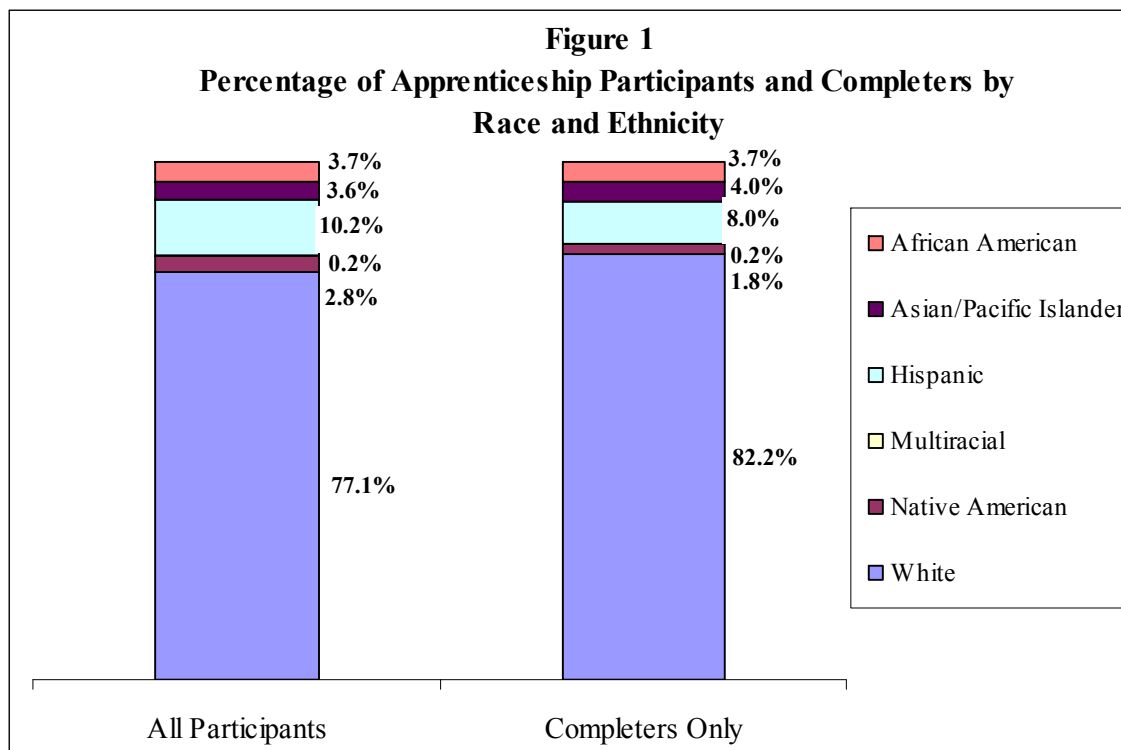
For this study, administrative records were obtained for 2,713 apprentices who left a program during the 2003-2004 program year. Overall, apprentices spent a median of 29 months in their program. Among apprenticeship completers, the median program length was 44 months.

This study includes information from ESD wage files from Washington, Idaho, and Oregon; and federal employment. In addition, 149 apprentices completed a telephone survey, providing additional data on employment and their satisfaction with the training. Employer satisfaction information was collected through a survey conducted during the summer of 2005; 194 firms that hired new employees who recently completed an apprenticeship responded to the survey.

Participant Characteristics

Apprentices reflect the racial and ethnic diversity of the state population (Figure 1).²⁶ Minority groups, with the exception of Asians and Pacific Islanders, are represented at or above their proportions of the state population (ages 16-74). Hispanics and Native Americans are not as well represented in the completer group as they are in the apprenticeship group as a whole.

²⁶ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



Relatively few women enter apprenticeships; only 15 percent of the 2003-2004 apprentices were women. This is similar to the 13 percent of the 2001-2002 cohort.

The typical age at which apprentices entered their programs was quite high. The median age at enrollment was 28 years. One quarter of the apprentices were age 36 or older. The median length in training was 29 months; for completers it was 44 months.

Competency Gains

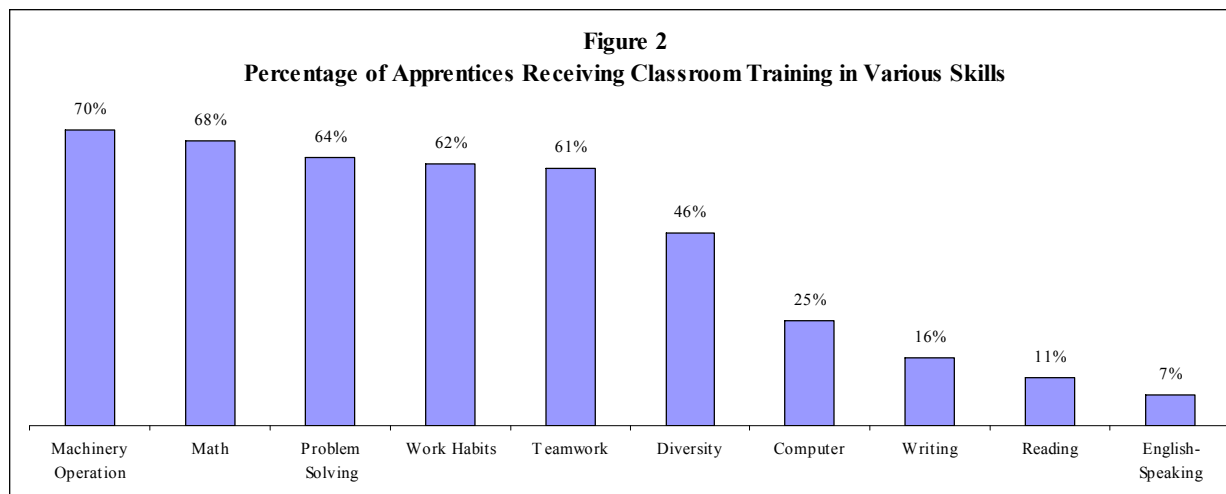
Of the apprentices leaving their program in 2003-04, 40 percent completed their apprentice program, which is about the same percentage of the 2001-2002 cohort who completed.

By definition, people enter an apprenticeship program to acquire occupation- or industry-specific training. Many apprentices also receive training in general workplace skills such as teamwork and problem solving. They receive both classroom²⁷ and on-the-job training, and our survey asked apprentices about their experience with both.

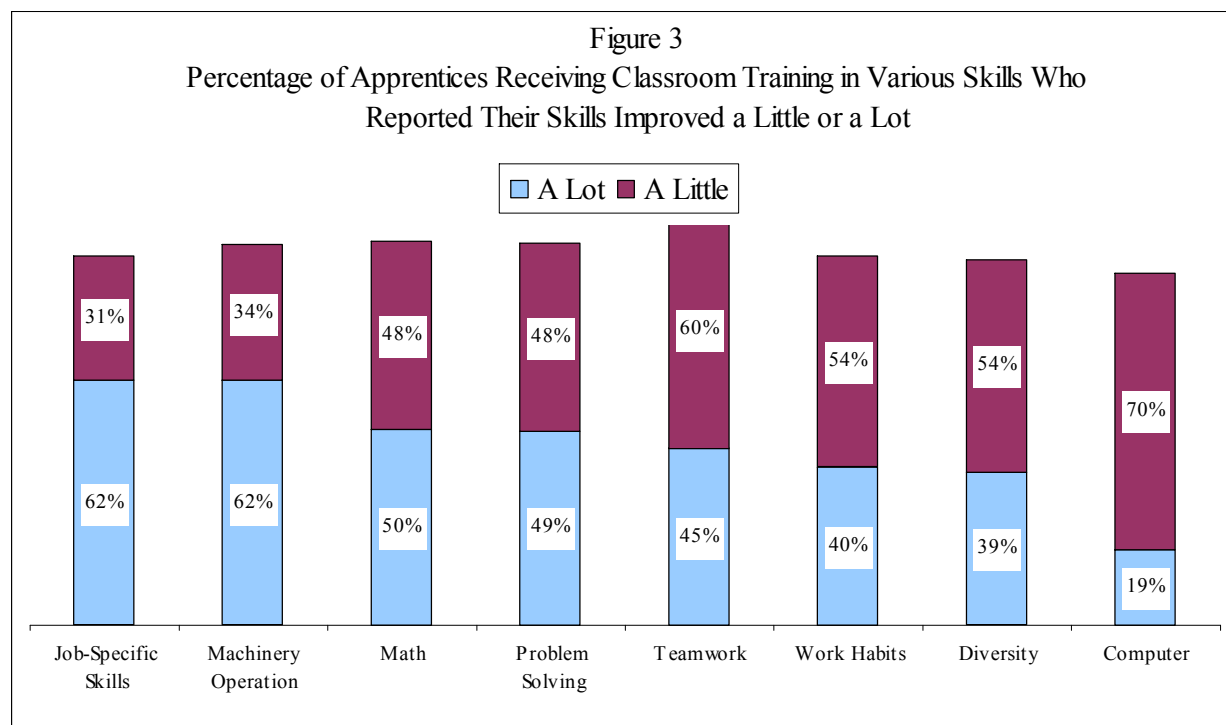
Classroom Skills Training

As with the 2001-2002 cohort, these apprentices reported receiving classroom training in a variety of skills (Figure 2). With the exception of math, apprentices of both cohorts were least likely to receive basic skills training.

²⁷ Apprentices are required to participate in at least 144 of classroom training annually.



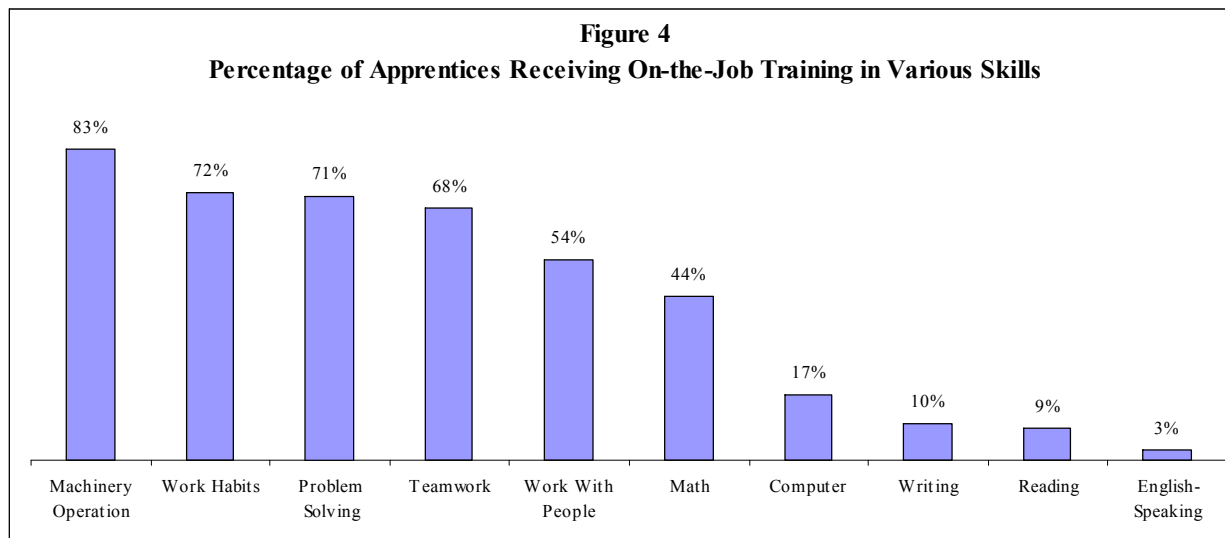
In both the previous and current studies, apprentices reported their skill in many areas improved as a result of the classroom training (Figure 3). The 2003-2004 cohort, however, were less likely than the 2001-2002 cohort to indicate “a lot” of improvement in job specific skills (62 percent versus 72 percent) and computer skills (19 percent versus 41 percent). Regardless, apprentices continued to report more substantial improvements in technical and math skills than in general workplace skills.



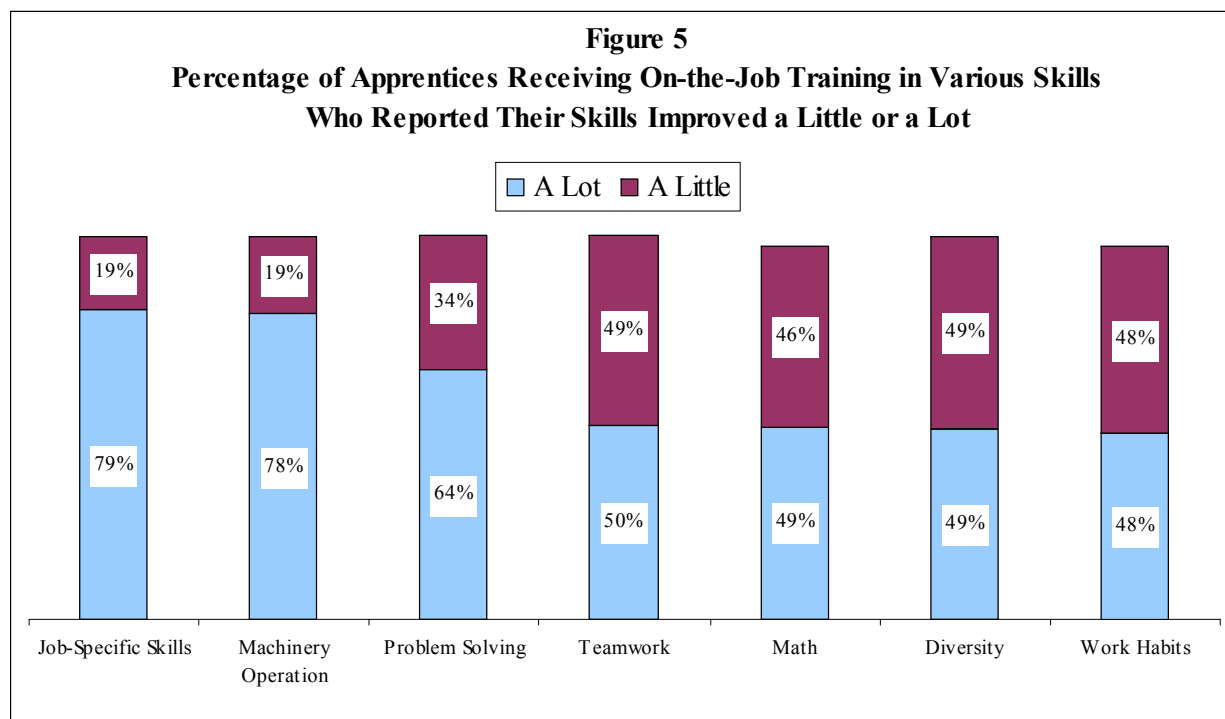
Among apprentices who were employed when surveyed, 84 percent reported their training was related to their job, slightly less than the 88 percent who so reported two years ago.

On-the-Job Skills Training

As in the previous study, high percentages of apprentices reported receiving on-the-job training in job-specific, machinery operations, and various workplace skills (Figure 4).

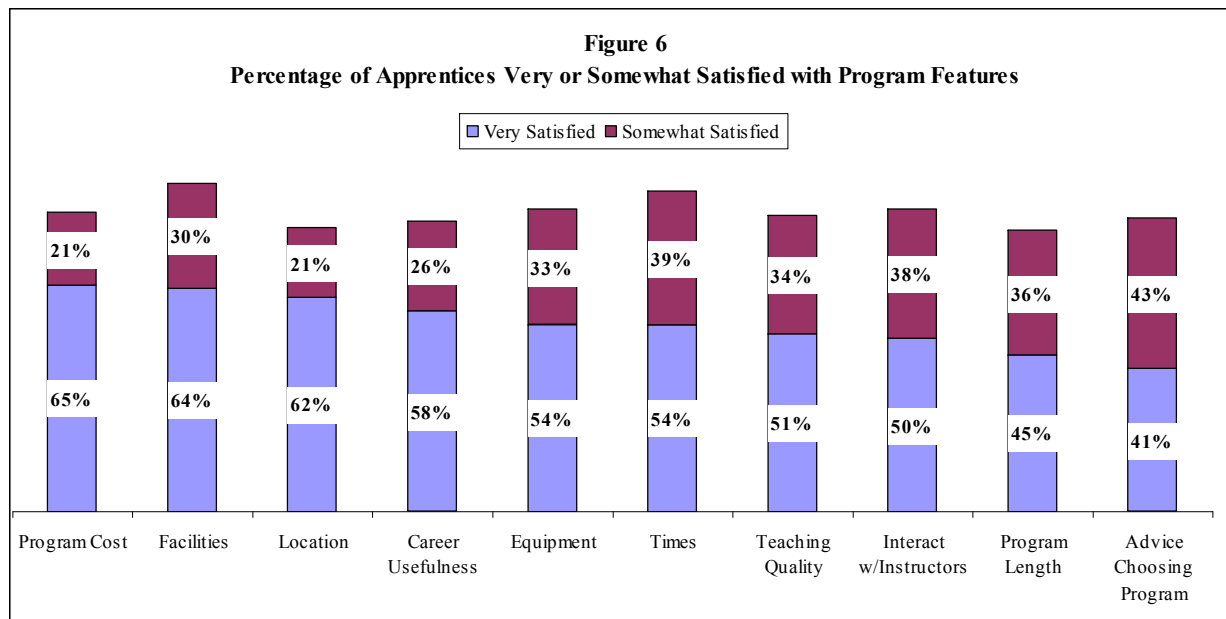


Apprentices continue to rate improvements in various skills areas due to their on-the-job training highly (Figure 5). As expected, the highest percentages indicated “a lot” of improvement in their job-specific and machinery operation skills.

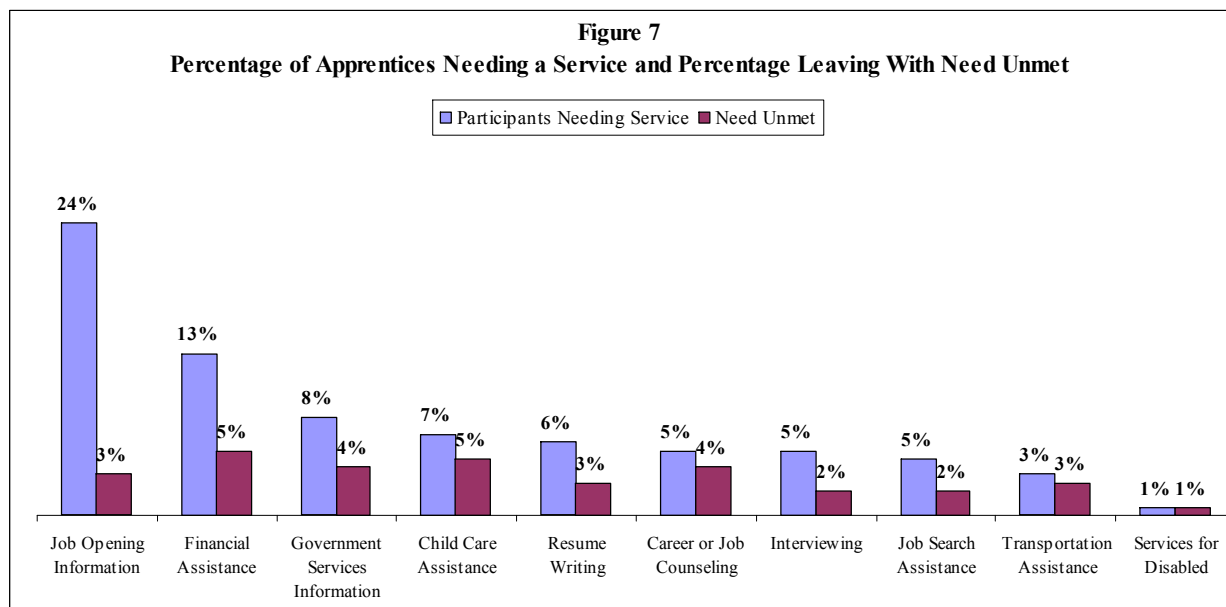


Participant Satisfaction

The 2003-2004 apprentices expressed similar high levels of overall satisfaction as in the previous study: 84 percent expressed satisfaction with their classroom training and another 84 percent with their on-the-job training. Eighty-two percent met their educational objectives by participating in the training, down slightly from the eighty-nine percent of the 2001-2002 apprentices. Apprentices were more likely to be “very satisfied” with the facilities and cost of their programs and less likely to be “very satisfied” with advice on selecting a training program and program length (Figure 6).

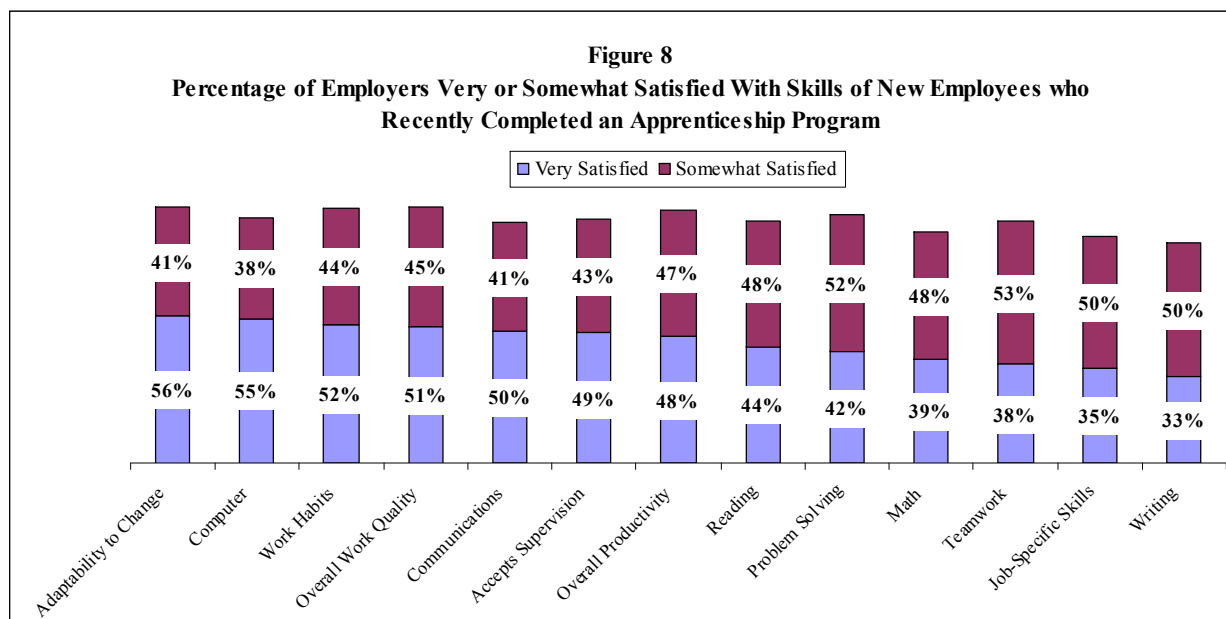


Apprentices reported a much lower need for support services than the other groups we studied. Their greatest needs were for information on job openings and financial assistance, and most of those who required support services received them (Figure 7).



Employer Satisfaction

The employer survey asked firms to evaluate new employees who had recently completed an apprenticeship program. Most employers were at least somewhat satisfied with all these skill categories (Figure 8). Comparisons to the previous survey indicate a much higher percentage of employers “very satisfied” with the following skills: computer (55 percent versus 31 percent), problem-solving (42 percent versus 25 percent), communications (50 percent versus 35 percent), adaptability to change (56 percent versus 44 percent), and overall work quality (51 percent versus 41 percent). A much lower percentage, however, indicated being “very satisfied” with job-specific skills (35 percent versus 54 percent) and teamwork (38 percent versus 50 percent).



Employment and Earnings

Labor market outcomes for apprenticeships are higher than for any other program we studied. In addition to the quality of apprenticeship training and the wage levels in these occupations, this result may be due to the relatively long length of the program.

According to survey results, 87 percent of apprentices reported being employed nine months after leaving training (Figure 9).²⁸ To find out more about the students’ postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

²⁸ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

Figure 9
Employment and Earnings of Apprentices in the Third Quarter After Leaving Program

	1995-96	1997-98		1999-2000		2001-2002		2003-2004	
	All	All	Completers	All	Completers	All	Completers	All	Completers
Percentage self-reporting employment during third quarter after leaving program	93	93	na	92	na	87	na	87	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	68	64	75	75	93	73	86	73	87
Median quarterly hours worked of those working	455	456	480	460	489	442	464	451	472
Percentage employed full-time (averaging 30 or more hours/week) of those working	63	58	66	65	82	60	68	61	67
Median annualized earnings of those working	\$31,964	\$30,300	\$47,268	\$34,819	\$54,343	\$32,663	\$47,671	\$33,229	\$52,377
Size of household in which median earnings would support at poverty level	7.9	7.4	12.6	8.7	14.7	8.1	12.7	8.3	14.1
Size of household in which median earnings would support at twice poverty level	3.0	2.7	5.3	3.4	6.4	3.1	5.4	3.2	6.1
Median hourly wage of those working	\$20.38	\$18.76	\$27.03	\$20.66	\$29.30	\$21.77	\$29.16	\$21.96	\$29.65
Percentage self-reporting receipt of medical benefits from employer	81	83	na	89	na	87	na	81	na
Percentage self-reporting receipt of pension benefits from employer	72	78	na	81	na	80	na	79	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.									

Record matches found 73 percent of apprentices had reported employment during the third quarter after they left the program. Their median wage²⁹ was \$21.96 per hour, and annualized earnings were \$33,229. The median wage of apprentices is high, but there is considerable variation in wages (Figure 10). Limiting our analysis to just those apprentices who completed their program, the outcomes are even better. These results highlight the importance of completing an apprenticeship program.

Figure 10
Distribution of Hourly Wages of Apprentices in the Third Quarter After Leaving Program

Quartile	Hourly Wage
Highest	Above \$30.15
Third	\$21.96 – \$30.15
Second	\$13.52 - \$21.96
Lowest	Below \$13.52

During the third quarter after leaving their programs, the majority of apprentices were employed in construction industries (Figure 11). Many apprentices, however, took jobs in manufacturing, services, retail trade, and public administration. Most of the apprentices employed in manufacturing, retail trade, and service industries left their programs without completing training.

²⁹ All wages and earnings are stated in first quarter 2005 dollars.

Figure 11
Industry of Employment of Apprentices in the Third Quarter After Leaving Program: 2003-2004

Industry Group	Employment
Natural Resources and Mining	0.9%
Construction	53.5%
Construction of Buildings	7.6%
Heavy and Civil Engineering Construction	5.3%
Foundation, Structure, and Building Exterior Contractors	8.0%
Building Equipment Contractors	22.8%
Building Finishing Contractors	8.2%
All Other Specialty Contractors	1.7%
Manufacturing	7.9%
Wholesale Trade	2.7%
Retail Trade	4.3%
Transportation and Warehousing and Utilities	2.8%
Information	0.2%
Financial Activities	1.2%
Services	22.5%
Professional, Scientific, and Technical Services	1.4%
Administrative and Support and Waste Management and Remediation Services	5.6%
Education Services	7.3%
Health Care	1.6%
Social Assistance	1.0%
Arts, Entertainment, and Recreation	1.1%
Accommodation and Food Services	2.9%
All Other Services	1.6%
Public Administration	3.9%
TOTAL	100%

Employment and earnings outcomes varied by gender and race and ethnicity.³⁰ Women were as likely as men to be employed in the third quarter after leaving their apprenticeship, but less likely to be employed full-time (47 percent versus 64 percent). Of those employed, women had median hourly wages that were 60 percent of males' and median annualized earnings that was 56 percent of males.

Within the construction industries, however, male and female apprentices earned relatively the same wage (females' median wage was 92 percent of males'). It appears that an important factor contributing to the gender gap in earnings is the concentration of women in apprenticeship programs that provide training outside the construction; precision, production, craft; and machinist trades. Among those leaving apprenticeships during 2003-2004, 49 percent of women (and virtually no men) left programs in early childhood education and teaching/library assistantship (Figure 12). Wages in these fields are considerably lower than in the construction; precision, production, craft; and machinist trades.

³⁰ Apprenticeship administrative records do not include information on disability status.

Figure 12		
Distribution of Apprentices by Trade Group and Gender		
Trade Group	Males	Females
Construction Trades	74%	31%
Precision, Production, Crafts	9%	2%
Machinist	7%	1%
Transportation Operators	3%	5%
Industrial Technology	2%	1%
Early Childhood Education	0%	9%
Teaching/Library Assistant	0%	40%
Other	6%	11%
Total	100%	100%

African American, Native American, and Hispanic apprentices were less likely than whites to be employed in the third quarter after leaving their programs. African Americans were also less likely to be employed full-time. For those employed, the median wage for African American apprentices was only 71 percent of whites; the median wage for Asians and Pacific Islanders was 87 percent of whites; and the median wage for Hispanics was 94 percent of whites.

Areas for Improvement

The results for apprenticeship training are quite positive. Median earnings and wages were relatively high, most participants were very satisfied with their training, most were employed, and almost all believed their training was related to their employment.

There are, however, areas for improvement. The typical age at which apprentices enter their programs remains quite high. Clearly greater efforts are needed in recruiting women into apprenticeships. Only 15 percent of participants ending an apprenticeship in 2003-2004 were women. Female apprentices typically earned less than men. An important factor contributing to the overall gender gap in earnings is the heavy concentration of women in apprenticeship programs that provide training in relatively low-paying trades.

Apprenticeship should also continue to address relatively high dropout rates. The long-term earnings impacts of training are substantially greater for completers. Particular attention still needs to be paid to the higher dropout rates among minority participants, especially among African Americans, Native Americans, and Hispanics.

Worker Retraining at Community and Technical Colleges

The Worker Retraining program provides dislocated workers and the long-term unemployed with access to job retraining for a new career. Program enrollments vary from year to year in response to layoffs; during recessions need increases. The industries from which students are laid off also vary over time.

About 5 percent of Worker Retraining participants receive their training at private career schools. This evaluation, however, is limited to training at community and technical colleges. The colleges provide training in occupational skills, related or supplemental instruction for apprentices, and basic skills and literacy. Students qualifying may receive financial assistance to help with their tuition.

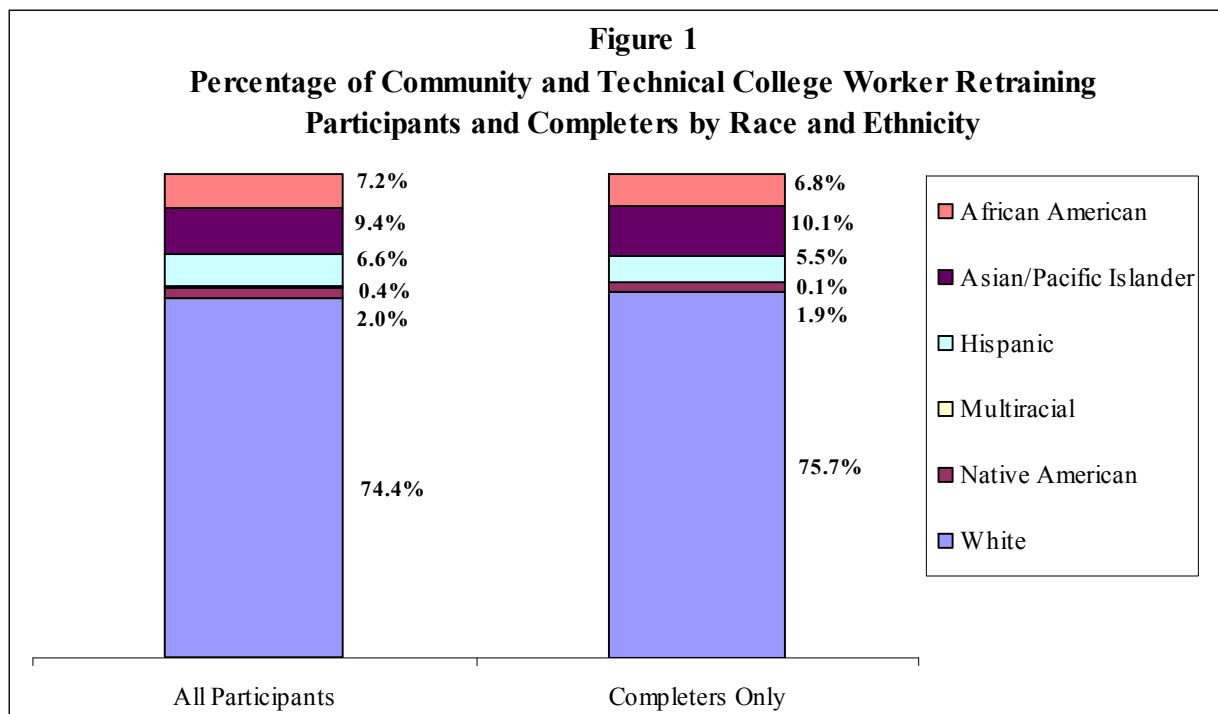
Information was obtained on 9,311 Worker Retraining students who completed or otherwise left a community or technical college program during the 2003-2004 school year. The median length of enrollment for these students was 15 months.

The study includes information from students' college enrollment records; ESD wage files from Washington, Idaho, and Oregon; and federal employment records. In addition, 140 students completed a telephone survey, providing additional data on employment and their satisfaction with the training.

Participant Characteristics

The racial and ethnic composition of Worker Retraining participants roughly reflects of the general population (Figure 1).³¹ The participants do, however, include a slightly higher proportion of people of color (26 percent); African Americans are especially well represented as compared to their share of the state population. With the exception of Hispanics, the racial and ethnic distribution among completers reflects of all Worker Retraining participants. The percentage of Hispanics among completers is lower than among all Worker Retraining participants.

³¹ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



Forty-eight percent of the 2003-2004 Worker Retraining participants are women; this is the same percentage of the 2001-2002 participants. Of the 2003-2004 completers, a similar 47 percent are women

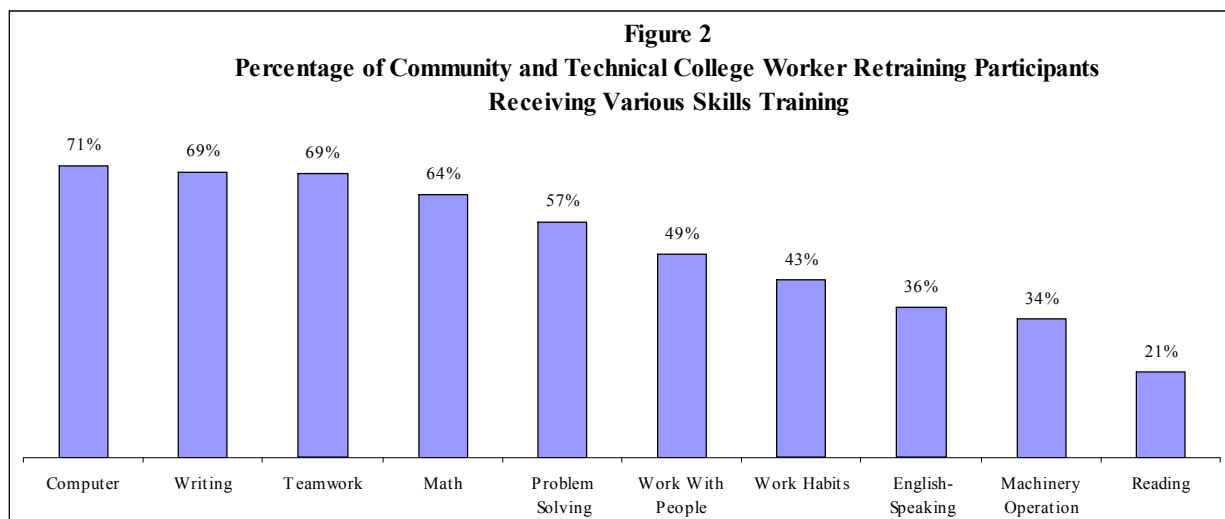
When they enrolled in the program, 44 percent had not previously attended college, 27 percent had attended college without receiving a credential, 18 percent had received a certificate or associate degree, and 11 percent had received a baccalaureate or higher degree. The median age upon leaving the program was 42 years; one quarter was over age 49.

Competency Gains

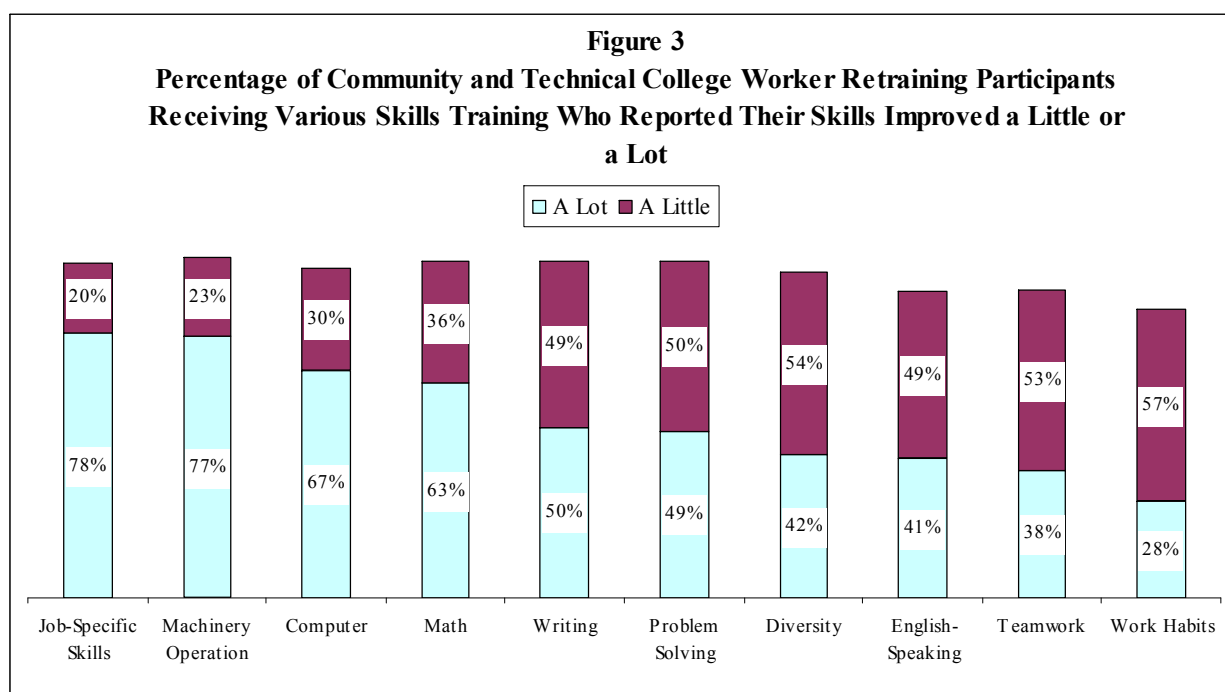
Of the Worker Retraining students, 64 percent were program completers—25 percent received an associate degree, 18 percent received a certificate, and 21 percent were defined as completers because they completed 45 or more credits or a unique (non-degree) program. This completion rate is higher than the 51 percent for those who left Worker Retraining programs in 2001-2002—17 percent received an associate degree, 13 percent received a certificate, and 21 percent were defined as completers because they completed 45 or more credits or a unique (nondegree) program.

The primary goal of worker retraining is to prepare dislocated workers for new jobs. Worker retraining students agree: 91 percent indicated that one of the main reasons they enrolled was to learn skills for a new job and 81 percent also indicated that they enrolled to get or finish a degree or certificate. In addition to learning job-specific skills, many students also received other types of training (Figure 2).

Compared to the 2001-2002 worker retraining participants, these participants appear to have received a wider variety of skills training. Much higher percentages received training in all areas, with the exception of computer skills, which was already high, and reading, which remains the lowest.



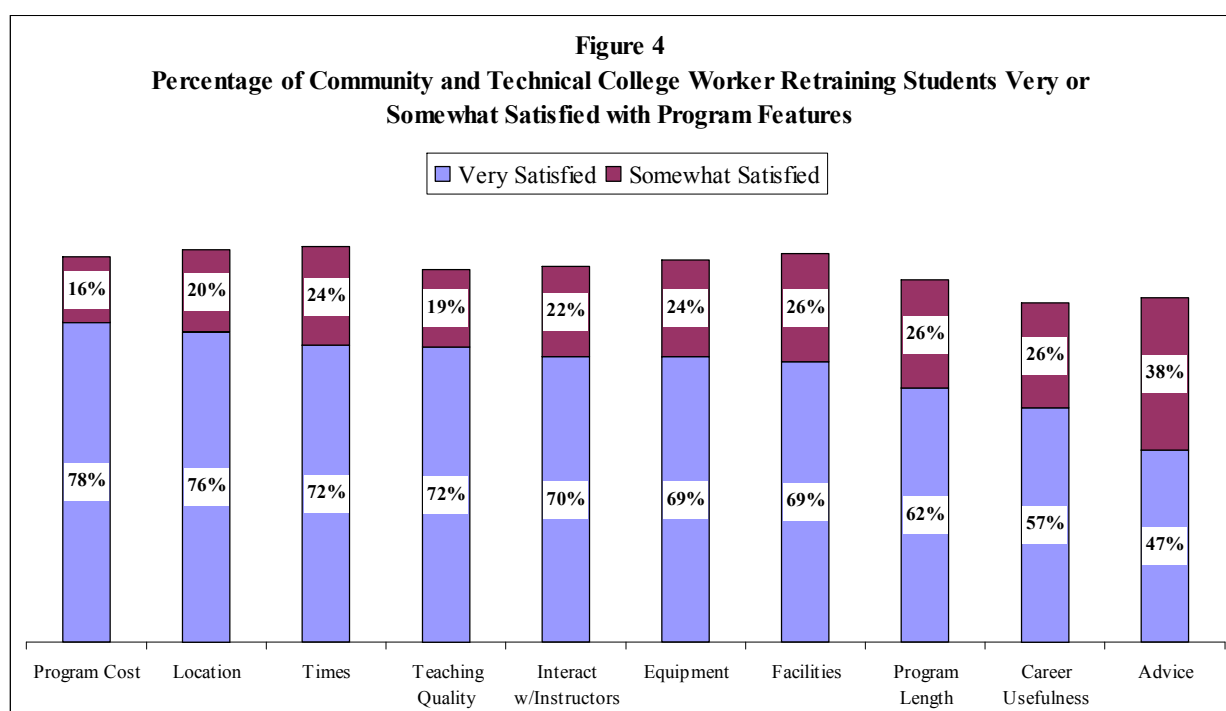
As in the previous study, most students reported their skills had improved as a result of their training (Figure 3). Higher percentages tended to report that their technical and math skills improved “a lot” compared to their general workplace and other basic skills. Compared to two years ago, a substantially higher percentage reported “a lot” of improvement in math skills and substantially lower percentages reported “a lot” of improvement in work habits and English-speaking skills.



Among students employed seven to nine months after leaving the program, 70 percent reported their education and training was related to their job, up from the 63 percent that so reported two years ago.

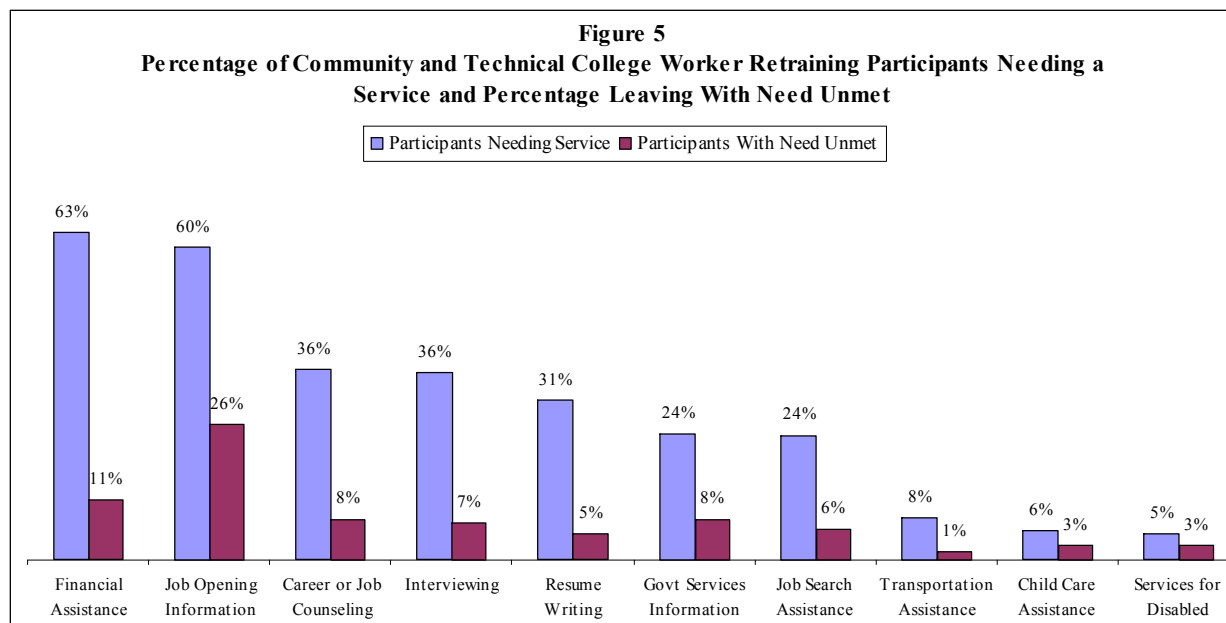
Participant Satisfaction

Similar to the previous study, 2003-2004 worker retraining participants express very high levels of satisfaction with their program. Ninety percent reported they had met their educational objectives. Ninety-three percent of participants reported they were “very satisfied” or “somewhat satisfied” with the program as a whole, up from 86 percent two years ago. Students tended to “very satisfied” with nearly every aspect of the program, particularly program cost, location, times and quality of teaching (Figure 4). Less than half, however, reported being “very satisfied” with advice on selecting a program; the same percentage that so reported two years ago.



As in the past, the two most frequently needed support services while enrolled were financial assistance and information about job openings (Figure 5). While most students received the support services needed, a relatively high percentage continue to leave with an unmet need³² for job opening information.

³² Unmet need refers to cases where the student reports that either did not receive the required service or what was provided did not meet their needs.



Employment and Earnings

According to the survey responses, 85 percent of students were employed during the period seven to nine months after leaving their program (Figure 6).³³ This is substantially higher than those reporting employment two years ago. Some of this may be due to our economic recovery over the past few years. To find out more about the students' postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

Record matches found that 71 percent of the 2003-2004 students had reported employment during the third quarter after they left their program, slightly higher than that reported two years ago. Their median hourly wage³⁴ was \$13.62, and they had median annualized earnings of \$23,450. Program completers were more likely to be working full-time and had higher earnings and hourly wage rates than those who did not complete their training programs.

³³ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

³⁴ All wages and earnings are stated in first quarter 2005 dollars.

Figure 6 Employment and Earnings of Community and Technical College Worker Retraining Students in the Third Quarter After Leaving Program							
	1997-98	1999-2000		2001-2002		2003-2004	
	All	All	Completers	All	Completers	All	Completers
Percentage self-reporting employment during third quarter after leaving program	na	na	na	71	na	85	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	73	75	77	67	70	71	73
Median quarterly hours worked of those working	470	480	482	455	455	467	473
Percentage employed full-time (averaging 30 or more hours/week) of those working	69	69	72	61	63	65	68
Median annualized earnings of those working	\$23,355	\$25,816	\$27,352	\$22,533	\$24,008	\$23,450	\$24,545
Size of household in which median earnings would support at poverty level	5.2	6.0	6.5	5.0	5.4	5.3	5.6
Size of household in which median earnings would support at twice poverty level	1.6	2.0	2.3	1.5	1.7	1.7	1.8
Median hourly wage of those working	\$12.60	\$14.01	\$14.44	\$13.27	\$13.69	\$13.62	\$13.89
Percentage self-reporting receipt of medical benefits from employer	na	na	na	67	na	68	na
Percentage self-reporting receipt of pension benefits from employer	na	na	na	42	na	45	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.							

There continues to be considerable variation in wages across Worker Retraining students. While one quarter earned more than \$18 an hour, another quarter had jobs that paid less than \$11 an hour. This wide distribution of wages is reflected in the dispersion of employment across higher and lower-wage industries (Figure 7). While nearly half of those employed were in service industries, considerable percentages were in manufacturing, retail trade, construction, and public administration.

Figure 7 Industry of Employment of Worker Retraining Students in the Third Quarter After Leaving Program: 2003-2004	
Industry Group	Employment
Natural Resources and Mining	1.1%
Construction	5.4%
Manufacturing	16.7%
Food and Beverage	1.2%
Wood and Paper Products	1.4%
Aerospace	6.7%
All Other Manufacturing	7.4%
Wholesale Trade	3.9%
Retail Trade	10.7%
Transportation and Warehousing and Utilities	4.3%
Information	2.2%
Financial Activities	4.1%
Services	46.6%
Professional, Scientific, and Technical Services	5.3%
Administrative and Support and Waste Management and Remediation Services	12.4%
Education Services	5.1%
Health Care	11.7%
Social Assistance	2.8%
Arts, Entertainment, and Recreation	1.5%
Accommodation and Food Services	4.0%
All Other Services	3.7%
Public Administration	5.0%
TOTAL	100%

Employment and earnings varied by gender, race and ethnicity, and disability status. Females were as likely as men to be employed in the third quarter after leaving the program. They, however, were less likely to be working full-time (60 percent versus 70 percent) and had an hourly wage that was 84 percent of males (\$12.42 versus \$14.76).

Asians and Pacific Islanders and Hispanics were more likely to be employed than whites during the third quarter after leaving training. While Asians and Pacific Islanders were more likely to be working full-time than whites (72 percent versus 65 percent), African Americans were less likely (55 percent). The median hourly wage for Hispanics was 90 percent of whites; for African Americans was 91 percent of whites; for Native Americans was 93 percent of whites; and for Asians and Pacific Islanders was 96 percent of whites.

Earnings and employment outcomes also varied by disability status. College records suggest 8 percent of the Worker Retraining students included in this study had a disability. These students were less likely to have employment reported to ESD during the third quarter after exit (53 percent versus 72 percent) and were less likely to be employed full-time (55 percent versus 66 percent). Among those working, the median hourly wage rate of those with a disability was 90 percent of those without a disability.

Areas for Improvement

Overall satisfaction with the Worker Retraining program was high among students. Satisfaction levels with the facilities, times, and location were at or above 95 percent. Moreover, over three-fourths of students reported substantial skill improvement in job-specific and machinery operation skills as a result of the training.

Most students received the support services needed. According to survey results, however, there were substantial unmet needs for information about job openings. Among the different elements of the program, satisfaction levels were relatively low with advice on selecting a program.

Wage and earnings gaps among different groups reflect those in the labor force at large: females earn less than males, racial and ethnic minorities earn less than whites, and participants with disabilities earn less than participants without disabilities.

Workforce Investment Act Title I-B Program for Dislocated Workers

The WIA Dislocated Worker program provides employment and training services to meet dislocated workers' needs; establishes early intervention for workers and firms facing substantial layoffs; and fosters labor, management, and community partnerships with government to address worker dislocation. In general, dislocated workers are people who lost jobs due to plant closures, company downsizing, or some other significant change in market conditions. In most cases, it must be unlikely they will return to their occupation, and they must be eligible for (or have exhausted) unemployment compensation.

Dislocated workers are eligible for "core services," which include skill assessment, labor market information, training program consumer reports, and job search and placement assistance. Second and third tier services are available for eligible dislocated workers unable to get jobs through core services. These may include more intensive assessments, counseling, and prevocational and vocational training.

ESD administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas. Services are coordinated through the state's one-stop career center system called WorkSource.

For this study, program records were obtained on 5,837 individuals who left the program during the 2003-2004 program year. Employment-related information was obtained through a match with ESD wage files from Washington, Idaho, and Oregon, and federal employment records. In addition, 1,436 participants responded to a telephone survey, providing additional information on employment, training, and satisfaction with the program.³⁵ Employer satisfaction was assessed through survey responses from 165 firms that hired employees who recently completed a WIA program.³⁶

The typical participant was enrolled in the program for 15 months. There was, however, considerable variation in the amount of time participants spent in the program. One quarter was enrolled for less than eight months, while another quarter was enrolled for over twenty-three months.

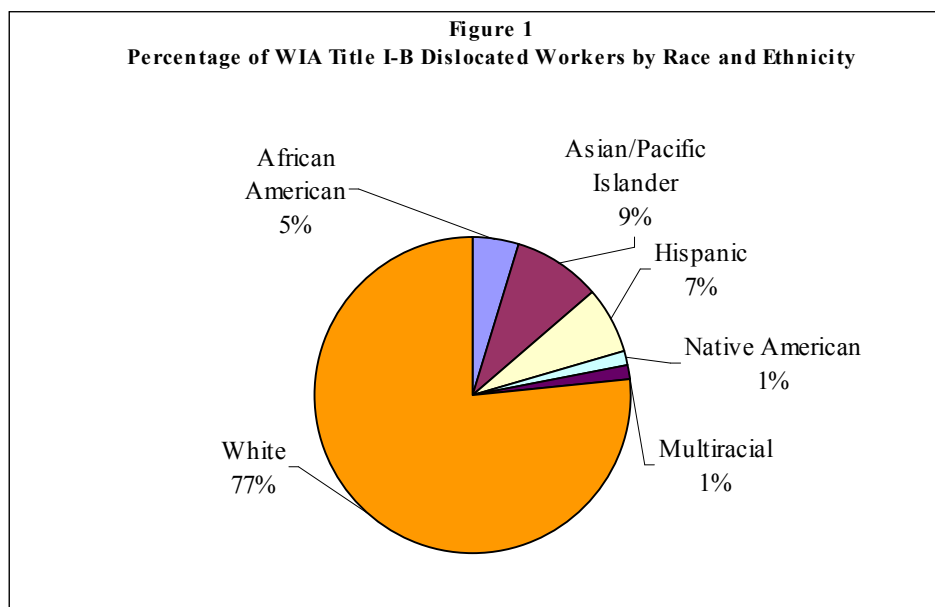
Participant Characteristics

Participants roughly mirrored the state's racial-ethnic population distribution (Figure 1).³⁷ Twenty-three percent were people of color.

³⁵ The responses from the participant survey were weighted to reflect the distribution of WIA Title I-B dislocated workers by Workforce Development Councils.

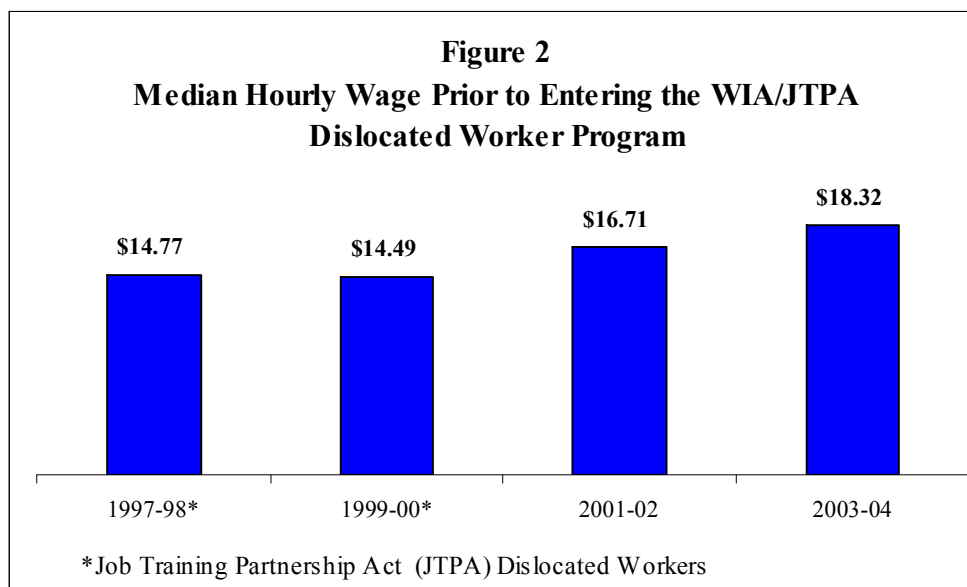
³⁶ The Employer Survey includes employers who hired a participant who completed at least one of the three WIA Title I-B programs: adult, dislocated worker, or youth.

³⁷ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



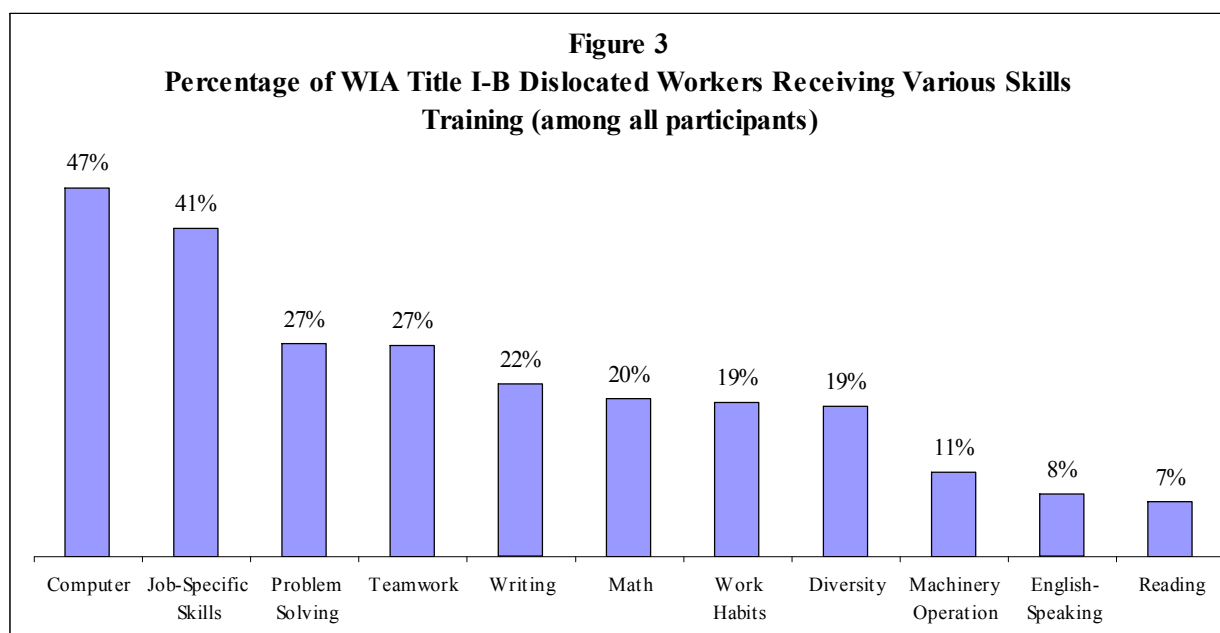
Forty-three percent of the WIA dislocated workers were women, up from thirty-seven percent two years ago. When they enrolled, 44 percent had not previously attended college, 36 percent had some college, and 19 percent had a bachelor's degree or higher. The median age at program registration was 42; one quarter was over 50 years of age and one quarter was under 34.

Among the 2003-2004 WIA dislocated workers, 38 percent were employed in manufacturing prior to registration, 25 percent were working in services, and 12 percent had jobs in trade industries. Ten percent were employed in aerospace prior to registration, and three percent were employed in aerospace after the program. The preprogram wages of the 2003-2004 WIA dislocated workers were substantially higher than those of the 2001-2002 dislocated workers (Figure 2).



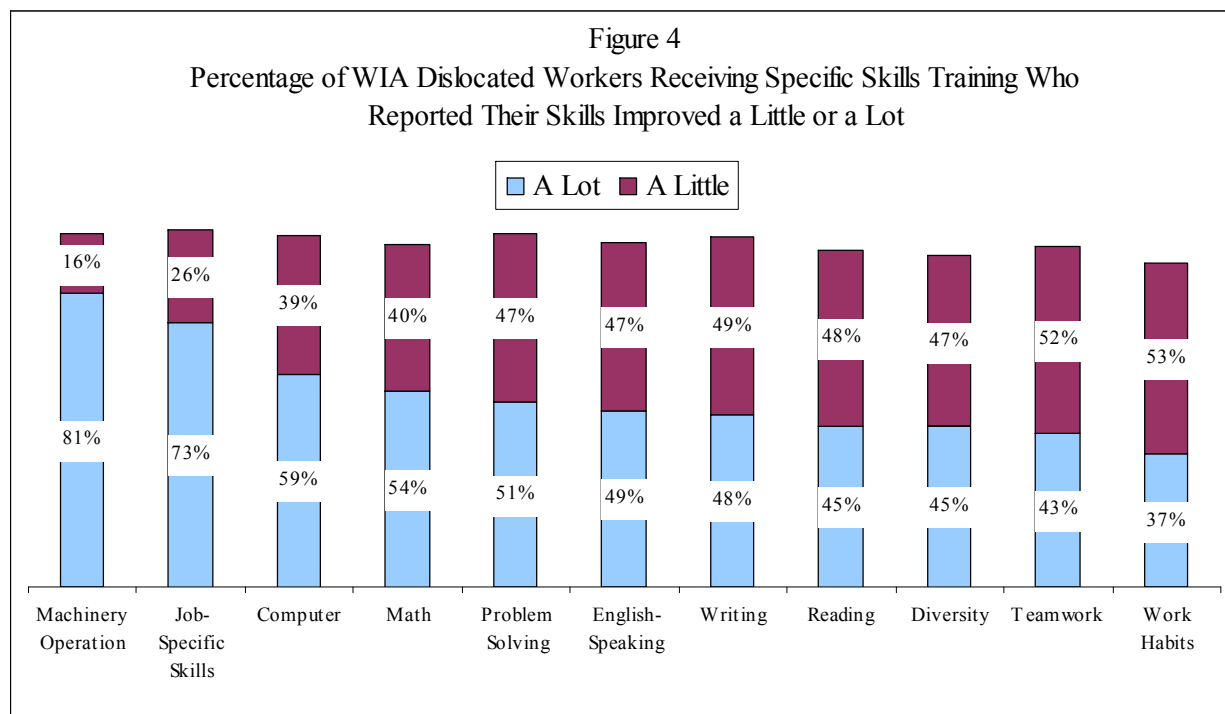
Competency Gains

Given the purpose of the program and the characteristics of participants, it is not surprising that 85 percent said they entered the program to acquire skills for a new job. According to the survey, 41 percent of all 2003-2004 WIA dislocated workers received specific job skills training (Figure 3); this is the same percentage reported by dislocated workers leaving during 2001-2002.³⁸ Similar to two years ago, the most common type of training was in computer skills.



With the exception of computer and specific job skills, relatively low percentages of dislocated workers received trainings in other skill areas. Of these, large majorities indicated that their skills in the various areas improved (Figure 4) as a result of the training. Over half of those who received training in technical skills, math, and problem-solving reported that their skills improved “a lot.” High levels of improvement were also voiced two years ago.

³⁸ Among participants leaving WIA during 2003-2004, 67 percent reported that they received some form of training. Among those receiving any training, 61 percent said they received job-specific skills training (or 41 percent of all participants). Among participants leaving WIA during 2001-2002, 67 percent reported that they received some form of training. Among those receiving any training, 62 percent said they received job-specific skills training (or 41 percent of all participants).



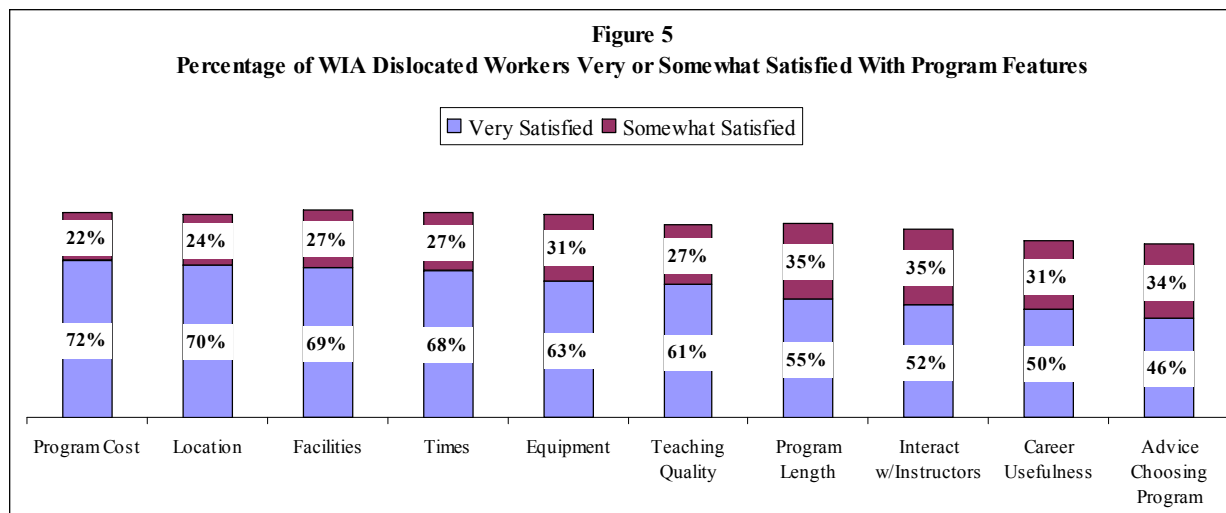
Administrative records data provide additional information on training received by WIA dislocated workers. These data suggest 64 percent of the participants leaving the program during 2003-2004 received occupational skills³⁹ training—8 percent received an associate degree, another 8 percent received an occupational skills license, and 36 percent obtained an occupational skills certificate/credential.

Among those employed after the program, 64 percent said their training was related to their job, virtually the same percentage reported two years ago.

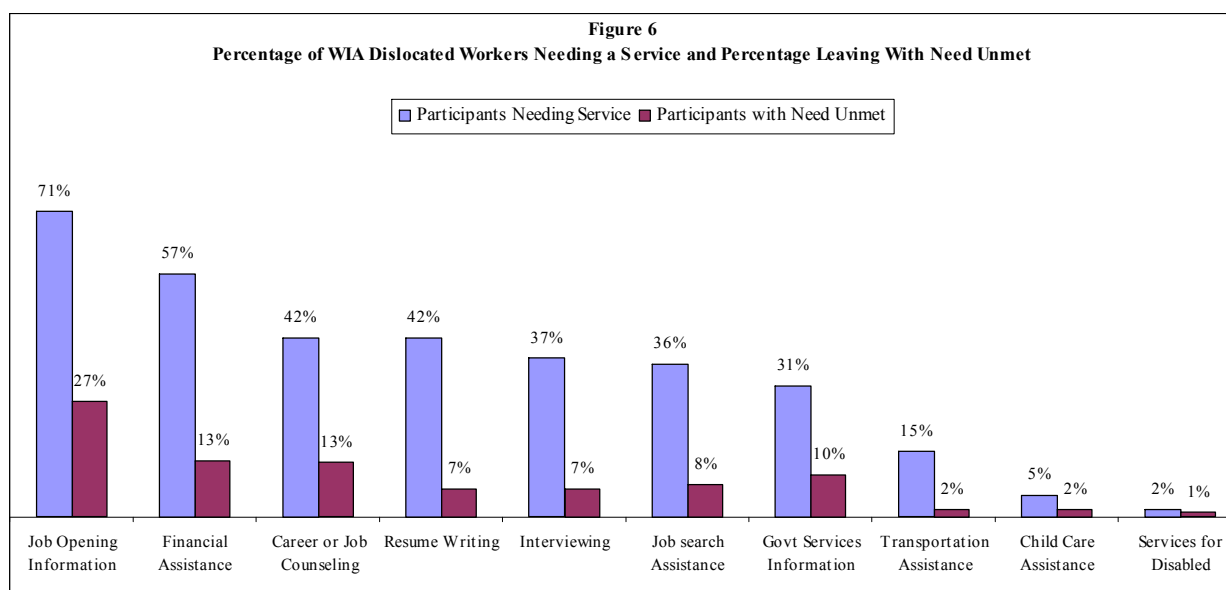
Participant Satisfaction

The survey results indicate participants were generally satisfied with the WIA Dislocated Worker program. Eighty percent said they met their educational objectives for enrolling in the program, and eighty-five percent reported overall satisfaction with the program; roughly the same levels of satisfaction that were reported in prior studies. Dislocated workers expressed very high levels of satisfaction with various features of the program (Figure 5). Over two-thirds were “very satisfied” with program costs, location, facilities, and times. The lowest level of reported satisfaction was for advice on selecting a program.

³⁹ Occupational skills training in the administrative records data could include the following types of services: occupational skills training, programs that combine workplace training with related instruction; training programs operated by the private sector, skill upgrading and retraining, entrepreneurial training, job readiness training, and customized training.



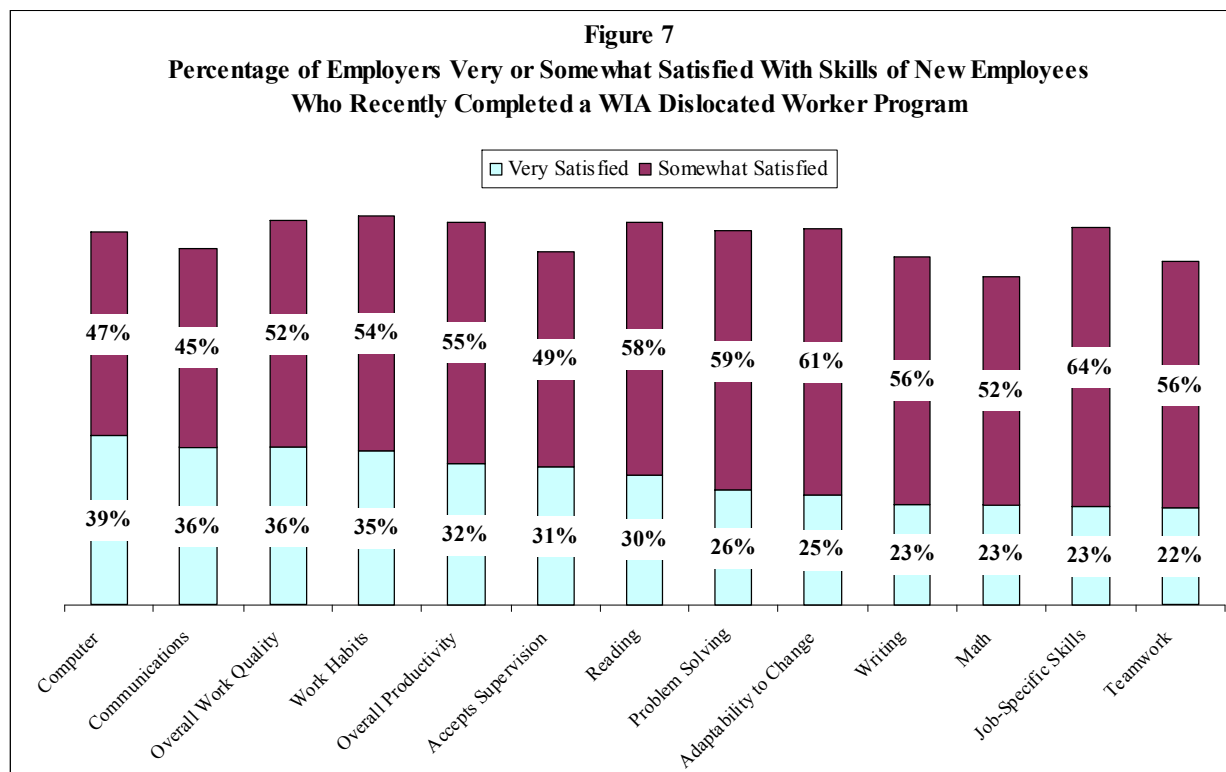
Similar to the last study, the support services most frequently needed by participants while enrolled in the program were information on job openings and financial assistance (Figure 6). Dislocated workers tended to receive the support services they needed. As in the past, however, a large percentage left the program with an unmet need for information on job openings.



Employer Satisfaction

It was not feasible to survey employers about each of the WIA programs included in the study (Adult, Dislocated Worker, and Youth programs) separately because there were too few individuals coming out of each program for a sufficient percentage of employers in the state to have had experience employing recent participants. Employers were instead asked about workers who had been in WIA programs. This section presents findings on employer satisfaction with new employees who completed any type of WIA program.

Overall, the results indicate the majority of employers were satisfied with the quality and productivity of these workers (Figure 7). Nevertheless, the percentage indicating being “very satisfied” was lower in this survey than in the previous.



There were mixed results in terms of being “very satisfied” with general workplace skills, occupational skills, and basic skills. While relatively higher percentages of employers were “very satisfied” with computer and workplace skills of communication and work habits, low percentages were “very satisfied” with teamwork, job-specific, math, and writing skills of WIA participants

Employment and Earnings

According to survey responses, 85 percent of the 2003-2004 WIA Dislocated Worker program participants had a job seven to nine months after leaving their program (Figure 8).⁴⁰ To find out more about the students’ postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

⁴⁰ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

Figure 8
Employment and Earnings of WIA Title I-B Dislocated Workers in the Third Quarter After Leaving Program

	1995-96*	1997-98*	1999-00*	2001-02	2003-04
Percentage self-reporting employment during third quarter after leaving program	81	83	83	82	85
Percentage with employment reported by employers to ESD the third quarter after leaving program	74	74	75	74	76
Median quarterly hours worked of those working	493	484	495	494	486
Percentage employed full-time of those working (averaging 30 or more hours/week)	75	67	70	74	73
Median annualized earnings of those working	\$29,083	\$25,537	\$25,857	\$27,373	\$27,929
Size of household in which median earnings would support at poverty level	7.0	5.9	6.0	6.5	6.6
Size of household in which median earnings would support at twice poverty level	2.5	2.0	2.0	2.3	2.3
Median hourly wage of those working	\$15.49	\$13.65	\$13.83	\$14.41	\$14.82
Percentage self-reporting receipt of medical benefits from employer	68	68	72	75	66
Percentage self-reporting receipt of pension benefits from employer	38	42	40	43	36
Notes: Earnings and wages are expressed in first quarter 2003 dollars. Poverty levels based on federal poverty guidelines identified by the Department of Health and Human Services for 2003. *Figures from 1995 through 2000 are for the JTPA III Dislocated Worker program.					

Record matches found 76 percent had reported employment during the third quarter after they left the program. Their median hourly wage⁴¹ was \$14.82, and the median annualized earnings was \$27,929. The median wage of WIA dislocated workers is relatively high, but there is considerable variation in wages (Figure 9). Further, the typical (median) wage replacement rate from the third quarter prior to registration compared to the third quarter postprogram was 87 percent (the mean replacement rate was 93 percent).⁴²

Figure 9 Distribution of Hourly Wages of WIA Dislocated Workers in the Third Quarter After Leaving Program	
Quartile	Hourly Wage
Highest	Above \$20.25
Third	\$14.82 – \$20.25
Second	\$11.22 - \$14.82
Lowest	Below \$11.22

Over one-third of the participants were dislocated from manufacturing jobs—including 10 percent from aerospace, 6 percent from the wood and paper products, and 4 percent from alumina and aluminum products. After leaving the program, only 17 percent found jobs in the manufacturing sector—about 3 percent found employment in the aerospace industry. Compared to preprogram employment, postprogram employment were more likely to be in the services and retail trade rather than manufacturing industries (Figure 10).

⁴¹ All wages and earnings are stated in first quarter 2005 dollars.

⁴² Wage replacement is measured here as follows. We calculate the ratio of the hourly wage during the third quarter after the program to the wage during the third quarter prior to the program for each participant who had nonzero wages in both of the periods. The reported statistics are the overall median and mean for these participants.

Figure 10 Industry of Employment of WIA Dislocated Workers During Third Quarter Prior to Program and Third Quarter After Program		
Industry Group	Prior Employment	Postprogram Employment
Natural Resources and Mining	2.9%	2.2%
Construction	3.4%	5.2%
Manufacturing	38.4%	16.5%
Food and Beverage Products	2.4%	1.5%
Wood and Paper Products	5.7%	3.1%
Alumina and Aluminum Products	3.7%	0.2%
Fabricated Metal Products	1.4%	1.2%
Computer and Electronic Products	5.8%	1.7%
Aerospace	10.0%	2.7%
All Other Manufacturing	9.4%	6.2%
Transportation and Warehousing and Utilities	5.6%	6.4%
Wholesale Trade	5.3%	5.2%
Retail Trade	6.7%	8.9%
Information	6.5%	3.5%
Financial Activities	3.9%	5.6%
Services	25.2%	42.9%
Professional, Scientific, and Technical	6.6%	7.1%
Administrative and Support and Waste Management and Remediation	8.7%	11.8%
Education	1.4%	4.8%
Health Care	2.1%	9.9%
Social Assistance	1.5%	2.2%
Leisure and Hospitality	2.7%	3.2%
All Other Services	2.2%	3.9%
Public Administration	2.1%	3.6%
Total	100%	100%

Employment and earnings outcomes of participants varied by gender, race and ethnicity, and disability status. During the third quarter after exit, although women and men had similar employment rates, women were less likely to be working full-time (70 percent versus 76 percent). The median wage for women was 83 percent of men.

Dislocated workers from racial and ethnic minority backgrounds were as likely to be employed as whites. Hispanics, Native Americans, and African Americans were slightly less likely to be employed full-time (67 percent of Hispanics and Native Americans, 68 percent of African Americans, and 74 percent of whites). The median hourly wage for Hispanics was 78 percent of whites and for Native American it was 83 percent of whites.

Employment and earnings also varied by disability status. Administrative records suggest 3 percent of the participants included in this study had a disability. Dislocated workers with disabilities were less likely to be employed (62 percent versus 76 percent) and working full-time (64 percent versus 74 percent). Their median earnings were 90 percent of those with no reported disability.

Areas for Improvement

WIA Dislocated Worker program participants were generally satisfied with the program and most said their educational objectives for enrolling in the program had been met. The labor market outcomes for participants leaving the WIA Dislocated Worker program during 2003-2004 were slightly better than of those who left during 2001-2002. Among those receiving job-specific training, 73 percent said their skills improved “a lot”; virtually the same percentage as reported two years ago.

There are, however, areas for improvement. Participant satisfaction with advice on program selection is relatively low, and substantial numbers report an unmet need for information about job openings. This has been a persistent issue in our evaluations.

The wages of participants differ by gender and race-ethnicity. Women earn less than men, and Hispanics and Native Americans earn less than whites. The program might do more to eliminate gender and racial-ethnic differences in the labor market outcomes.

Adult Basic Skills Education

ABE/ESL is provided by community and technical colleges and, to a lesser extent, community-based organizations. Among the ABE/ESL students included in this report, 92 percent received their training at community and technical colleges and 8 percent received training at community-based organizations. This report is limited to adults who identified employment-related reasons for enrolling in basic skills courses and who proceeded to take only basic skills courses.⁴³ These students are 78 percent of all the ABE/ESL students. Those who took basic skills courses for nonemployment-related reasons are not included.

ABE/ESL includes courses in four categories.

1. ABE provides remediation in reading, writing, and mathematics for adults whose skills are at, or below, the eighth grade level.
2. ESL provides non-transfer level instruction at competency levels ranging from beginning to advanced.
3. GED Test Preparation provides instruction in basic academic skills beyond ABE for those students whose goal is to pass the high school equivalency examination.
4. High School Completion provides instruction in high school courses for adults who want to earn an adult high school diploma.

For this study, participant records were obtained for 10,953 adults who left an ABE/ESL program during the 2003-2004 school year. The study also includes information from ESD wage files from Washington, Idaho, and Oregon. Federal employment records were also included. In addition, 293 students completed a telephone survey, providing additional data on employment and their satisfaction with the training. Survey responses from 282 firms that hired new employees who recently received ABE/ESL instruction provide information on employer satisfaction with the skills of these individuals.

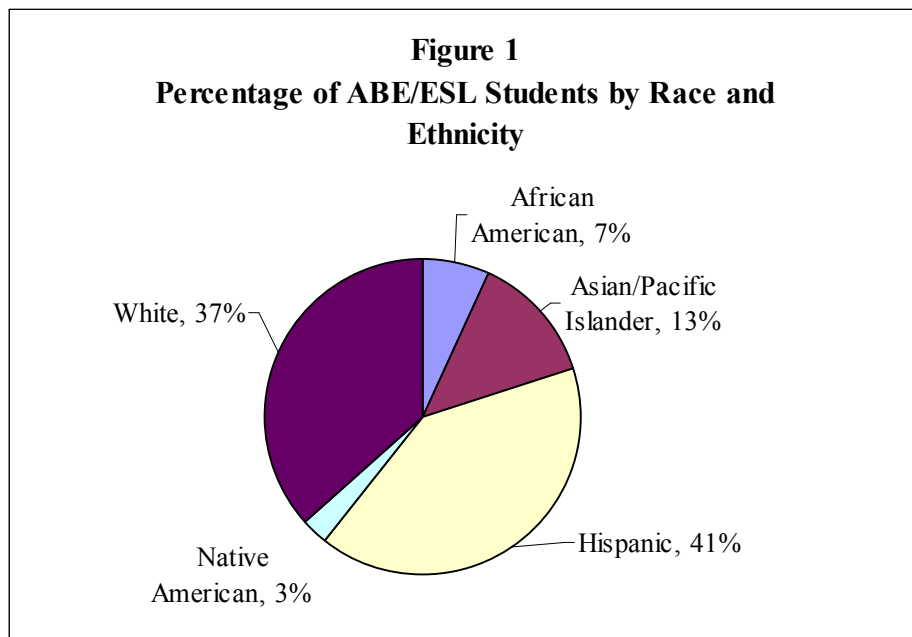
Participant Characteristics

ABE/ESL serves the most racially and ethnically diverse group of participants of any of the workforce development programs included in this report. Students who were people of color were 63 percent, up slightly from the 59 percent in 2001-2002 (Figure 1).⁴⁴ The percentage of

⁴³ Individuals who took vocational courses in addition to basic skills are included in the chapter on community and technical college job preparatory training. This chapter does, however, present net impact estimates for concurrent basic skills and job preparatory training.

⁴⁴ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.

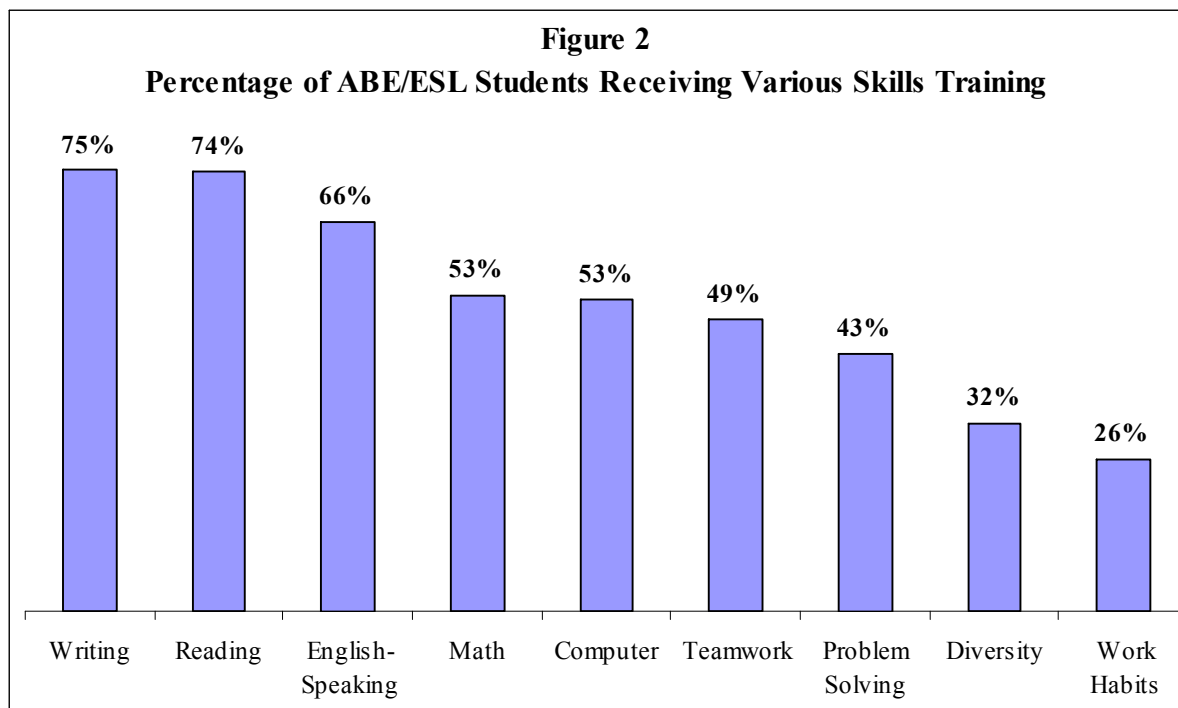
participants who are people of color is much higher than in the state population ages 16-74 (63 percent versus 20 percent).



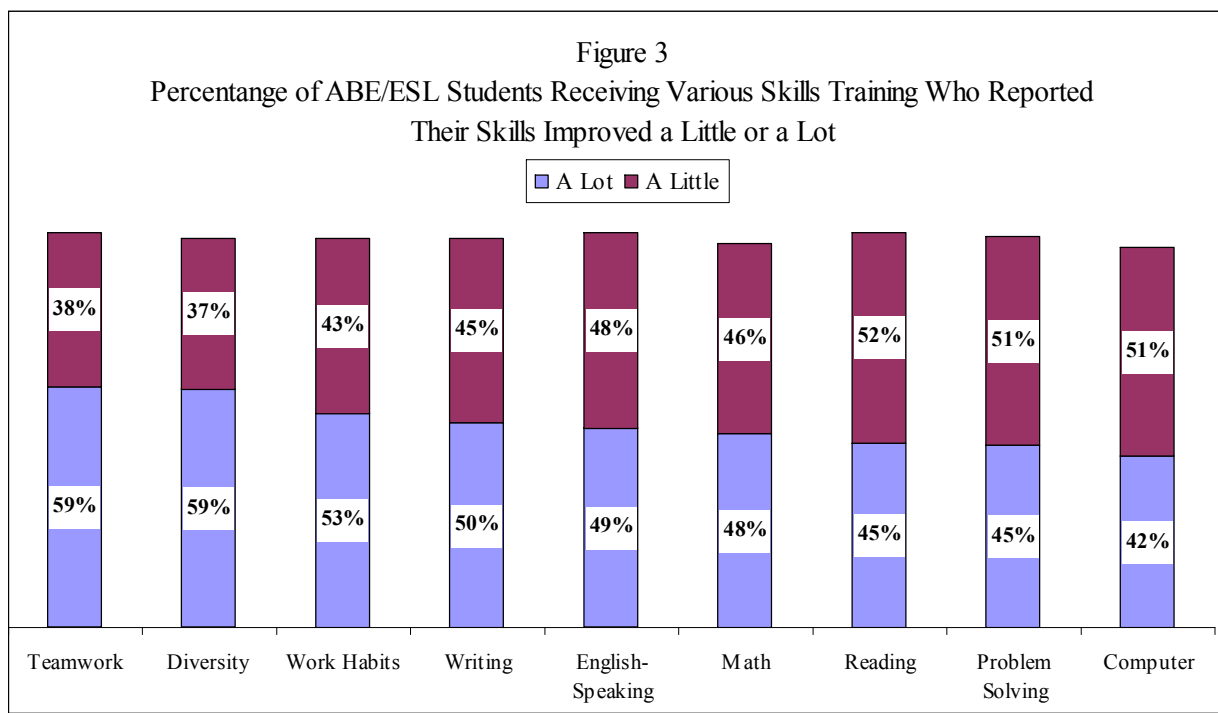
Fifty-eight percent of participants were female; virtually the same as in 2001-2002. The median age, when leaving a program, was 29 years; 25 percent were over age 38. Seventeen percent of the students reported receiving public assistance at registration.

Competency Gains

A large majority of students indicated that they enrolled in their program to acquire skills for a new job or to improve their skills for their present job. More specifically, most students reported seeking to improve their reading skills (74 percent), math skills (60 percent), and/or English-speaking skills (74 percent); 53 percent said that one of their reasons for enrolling was to get a GED. The majority of students reported receiving instructions in these areas (Figure 2). Students received training in other areas as well.

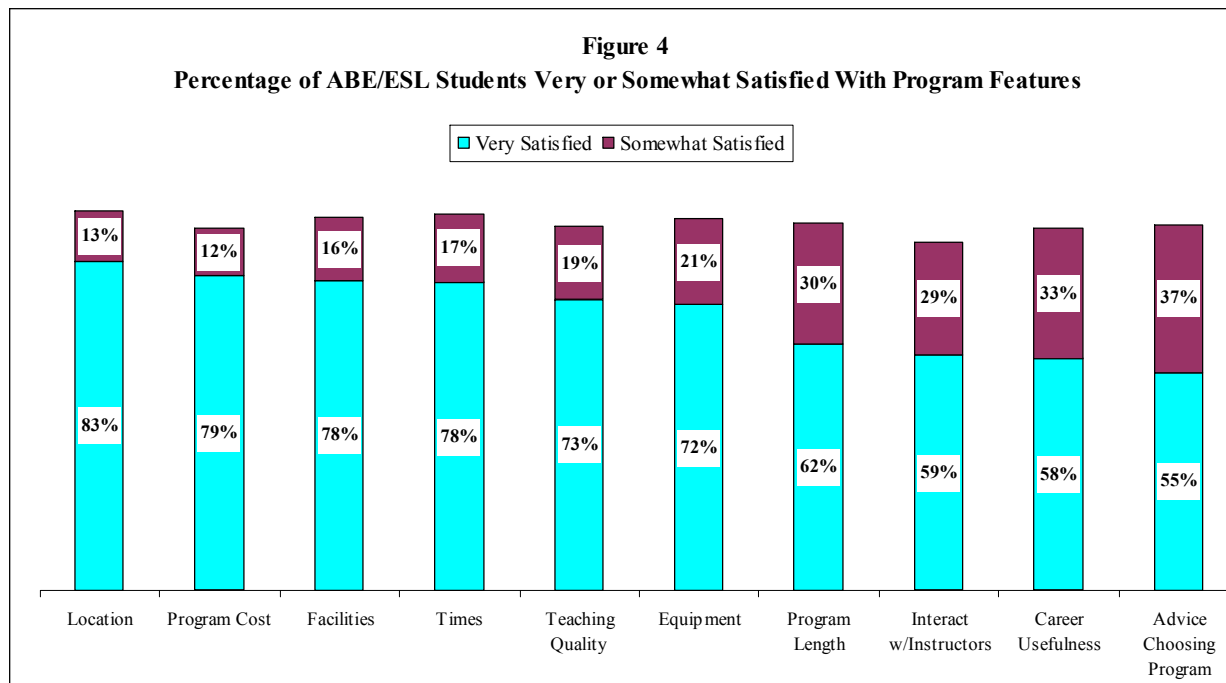


As in the previous study, most students reported their skills in these areas improved as a result of the training (Figure 3). Lower percentages, however, reported a lot of improvement in English-speaking, reading, and problem solving compared to the prior study. Students tended to report higher levels of improvement with workplace skills than with basic or computer skills.



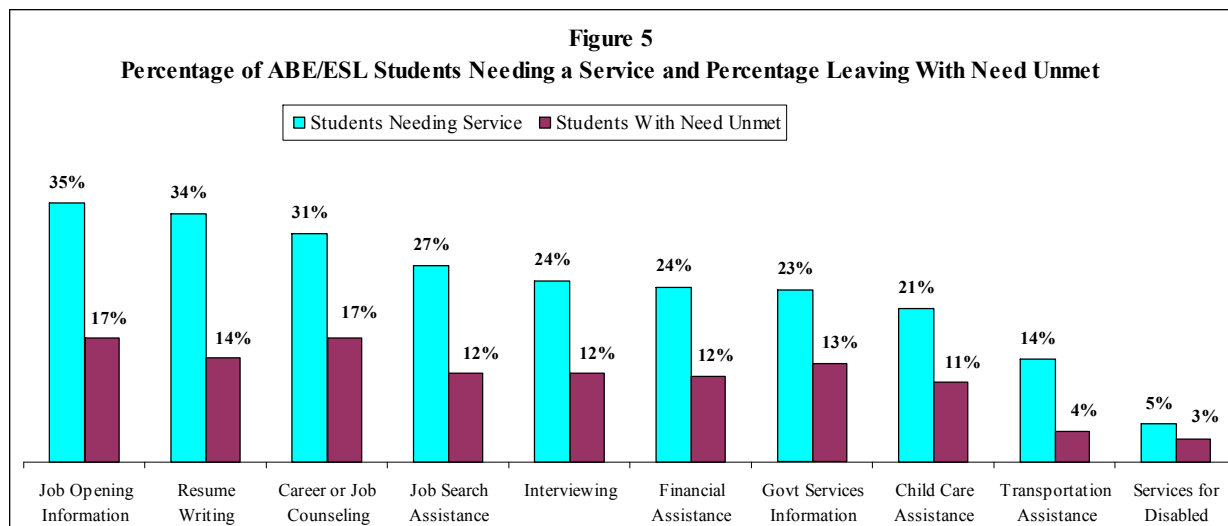
Participant Satisfaction

In general, students were satisfied with the training they received. Ninety-four percent of students reported being satisfied with their basic skills instruction overall, up slightly from the previous ninety-one percent. Unfortunately, the decline in the percentage who stated that they had met their educational objectives continued: 74 percent in 2003-2004, 80 percent in 2001-2002, and 87 percent in 1999-98. Nevertheless, large majorities of students indicated being satisfied with different aspects of their programs (Figure 4). Over three-fourths indicated being “very satisfied” with facilities, times offered, location, and program cost.⁴⁵



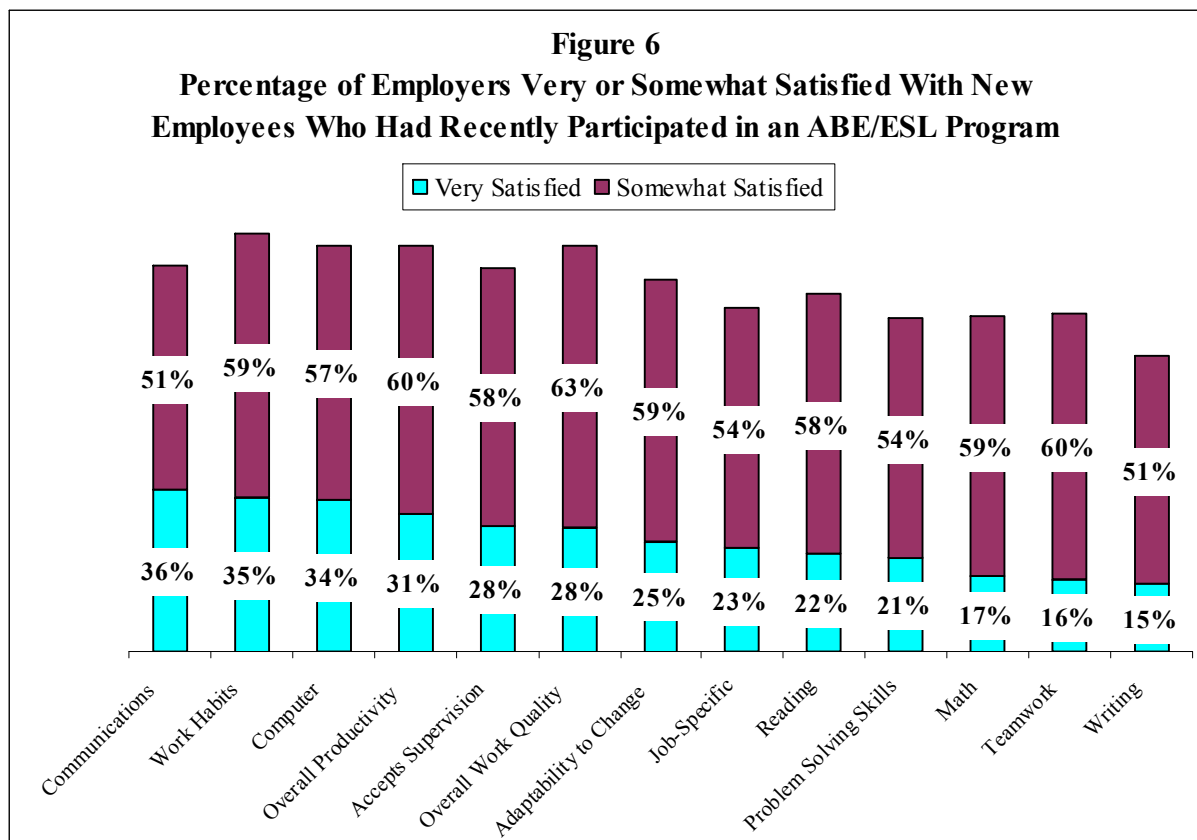
Similar to the previous survey, students reported information on job openings and resume writing as the support services most needed while enrolled (Figure 5). Students were more likely than not to receive the services they needed. Nevertheless, relatively high percentages said they left the program with their need for job opening information and counseling and guidance unmet. The percentage with unmet need for job opening information in 2003-2004, however, is much lower than was two years ago (17 percent versus 28 percent).

⁴⁵ ABE courses were offered free of tuition until the 2004-2005 school year, when the legislature imposed a nominal \$25 a course tuition fee.



Employer Satisfaction

The Workforce Board’s employer survey, which was administered during 2005, asked firms to evaluate new employees who had recently completed an ABE/ESL program. Ninety-one percent of employers stated they were at least somewhat satisfied with the overall work quality of these new employees—only twenty-eight percent, however, said they were “very satisfied” (Figure 6). Employers’ levels of satisfaction with various skills of new employees differed somewhat from of the previous survey. Much lower percentages were “very satisfied” with teamwork, willingness to accept supervision, adaptability to change, and work habits. On the other hand, much higher percentages were “very satisfied” with computer and communication skills.



Employment and Earnings

According to the survey responses, 64 percent of the 2003-2004 ABE/ESL students were employed during the period seven to nine months after leaving their program (Figure 7). To find out more about the students' postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active military duty, and those working for religious nonprofit organizations being the major groups of employment not included).

Figure 7
Employment and Earnings of ABE/ESL Students in the Third Quarter After Leaving Program

	1995-96	1997-98	1999-00	2001-02	2003-04
Percentage self-reporting employment during third quarter after leaving program	59	82	62	64	64
Percentage with employment reported by employers to ESD the third quarter after leaving program	49	62	60	55	56
Median quarterly hours worked of those working	419	452	433	419	412
Percentage employed full-time of those working (averaging 30 or more hours/week)	54	57	57	54	54
Median annualized earnings of those working	\$13,974	\$17,027	\$16,450	\$15,722	\$15,215
Size of household in which median earnings would support at poverty level	2.4	3.3	3.1	2.9	2.7
Size of household in which median earnings would support at twice poverty level	0.7	0.9	0.9	0.8	0.8
Median hourly wage of those working	\$8.69	\$9.58	\$9.93	\$9.58	\$9.66
Percentage self-reporting receipt of medical benefits from employer	52	63	45	53	39
Percentage self-reporting receipt of pension benefits from employer	37	35	29	32	20
Notes: Earnings and wages are expressed in first quarter 2003 dollars. Poverty levels based on federal poverty guidelines identified by the Department of Health and Human Services for 2003.					

According to record matches, 56 percent of ABE/ESL students had reported employment during the third quarter after they left the program, virtually the same percentage reported two years ago. Their median hourly wage⁴⁶ was higher than two years ago. The median postprogram earnings, however, were lower than in the previous three studies.

Although employment among ABE/ESL students is heavily concentrated in services, retail trade, and manufacturing industries (Figure 8), compared to 2001-2002, employment of 2003-2004 participants is much more likely to be in service industries and much less likely to be in retail trade.

⁴⁶ All wages and earnings are stated in first quarter 2005 dollars.

Figure 8	
Industry of Employment of ABE/ESL Students in the Third Quarter After Leaving Program	
Industry Group	Employment
Natural Resources and Mining	6.0%
Construction	5.2%
Manufacturing	13.0%
Food and Beverage	4.1%
Wood and Paper Products	1.6%
Fabricated Metal Products	1.0%
Transportation Equipment	1.6%
All Other Manufacturing	4.9%
Transportation and Warehouse and Utilities	2.3%
Wholesale Trade	3.0%
Retail Trade	13.5%
Financial Activities	2.9%
Services	52.3%
Professional, Scientific, and Technical	1.5%
Administration and Support and Waste Management and Remediation	11.4%
Education Services	2.0%
Health Care	9.7%
Social Assistance	3.8%
Arts, Entertainment, and Recreation	2.7%
Accommodation and Food Services	15.6%
All Other Services	5.7%
Public Administration	1.1%
Total	100%

Among students employed during the third quarter after exit, there is a substantial gender gap in labor market outcomes. Employment rates, hours worked, earnings, and wages are significantly lower for women (Figure 9).

Figure 9			
Gender Differences in Labor Market Outcomes Among ABE/ESL Students in the Third Quarter After Leaving Program			
	Women	Men	Ratio
Employment Reported to ESD	54%	59%	92%
Median Quarterly Hours Worked	386	455	85%
Median Annual Earnings	\$13,719	\$18,572	74%
Median Hourly Wage	\$9.13	\$10.59	86%

ABE/ESL students of color tended to have employment outcomes and earnings similar to or better than of whites. Hispanics had a higher employment rate than whites (62 percent versus 54 percent). Higher percentages of Hispanics and Asians and Pacific Islanders worked full-time compared to whites (62 percent, 59 percent, and 48 percent, respectively). Median wages for all minority groups were similar to of whites.

According to administrative records, 1 percent of the ABE/ESL students leaving college during 2003-2004 had a disability. Students with disabilities did less well in the labor market than their fellow students. They were less likely to have employment reported to ESD (35 percent versus 56 percent), they were less likely to work full-time (36 percent versus 54 percent), and their median hourly wage was 89 percent of students without a disability.

Areas for Improvement

ABE/ESL students have to overcome substantial barriers in order to succeed in the labor market. Some lack basic skills, some lack a high school diploma, and some lack proficiency in English. The majority of these students are people of color and many are poor. These factors should be taken into account when considering the results.

Overall, the survey responses suggest most students were satisfied with the program. While most said they met their educational objectives, the percentage continued to decline over previous studies. Also, most reported that their basic skills (reading, writing, math) and English speaking skills improved—however, only half or less reported that these skills improved “a lot.”

Student survey responses suggest a need for wider access to some support services. Many participants left the program with unmet needs for career or job counseling and information on job openings.

Employment rates and earnings were typically low for ABE/ESL students. In addition to having limited basic skills, many of these individuals lack job-specific skills. According to the employer survey, only 23 percent of employers were “very satisfied” with the job-specific skills of these students. Remember that most of this evaluation was restricted to only those ABE/ESL students who enrolled for a work-related reason, but who did not also participate in vocational training. Community and technical colleges’ efforts to integrate work skills training in ABE/ESL instruction should continue.

Postprogram wages and earnings were substantially lower for women than for men. They were also lower for people with disabilities. The program should do more to improve labor market outcomes for women and people with disabilities.

Workforce Investment Act, Title I-B Adult Program

The WIA Title I-B Adult program prepares individuals 18 years and older for participation in the labor force by providing core services and access to job training and other services. Core services, which are available to all adults, include skill assessment, labor market information, consumer reports on training programs, and job search and placement assistance. Second and third tier services are available for eligible adults unable to obtain jobs through core services alone. Priority is given to welfare and low-income clients. Intensive training and services may include more intensive assessments, individual counseling, employment planning, and prevocational and vocational training.

ESD administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA Title I-B activities in its local area. Services are coordinated through the state's one-stop career center system called WorkSource.

For this study, participant records were obtained on 4,443 adults who left the program during the 2003-2004 program year. Employment-related information was obtained through a match with the unemployment insurance wage files for those participants with employment reported to ESD in Washington, Idaho, and Oregon, and federal employment records. In addition, 877 participants responded to a telephone survey, providing additional information on employment, training, and satisfaction with the program.⁴⁷ Employer satisfaction was assessed through survey responses from 165 firms that hired employees who recently completed a WIA program.⁴⁸

The median length of participant enrollment in the WIA Adult program was 8 months for those leaving during 2003-2004, virtually the same length as for those leaving in 2001-2002.

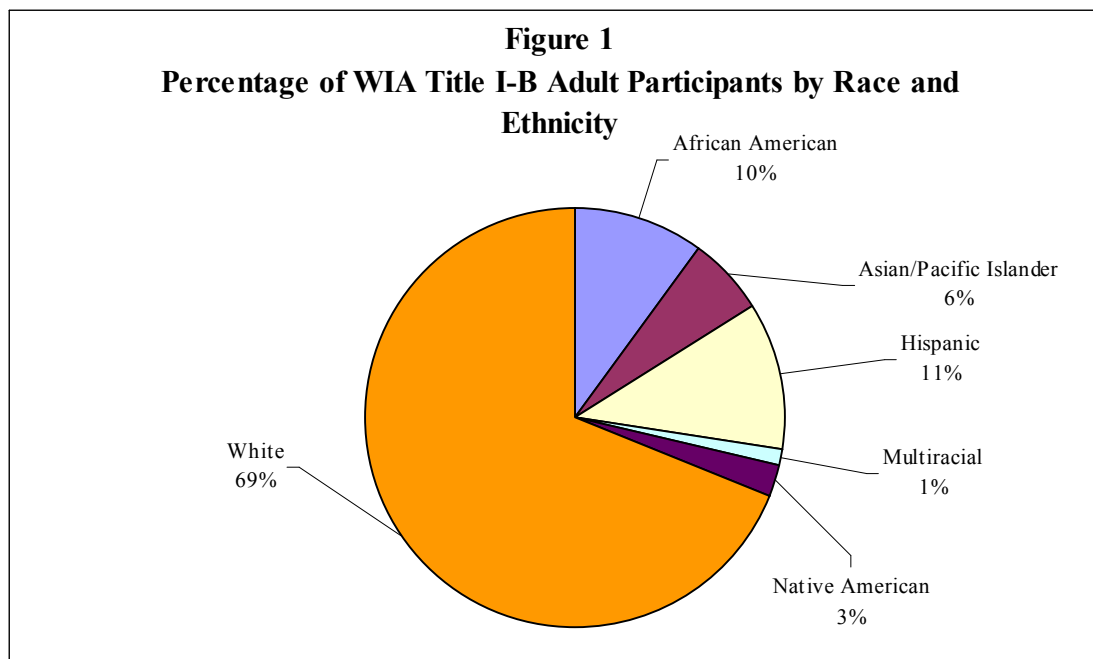
Participant Characteristics

Participants in the WIA Adult program were more likely to be a member of a racial or ethnic minority group, female, and have less education than the general state population. Among those leaving the program during 2003-2004, 31 percent were people of color (Figure 1).⁴⁹ Fifty-seven percent were women.

⁴⁷ The responses from the participant satisfaction survey were weighted to reflect the distribution of WIA Title I-B adult participants by Workforce Development Council.

⁴⁸ The Employer Survey includes employers who hired a participant who completed at least one of the three WIA Title I-B programs: adult, dislocated worker, or youth.

⁴⁹ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



When they enrolled, 16 percent had neither a high school diploma nor GED, and only 39 percent had previously attended college.⁵⁰ Fourteen percent were limited English proficient and 10 percent received public assistance⁵¹ while enrolled in the program. The typical (median) age when leaving the program was 38; one quarter was over 48 years of age.

Competency Gains

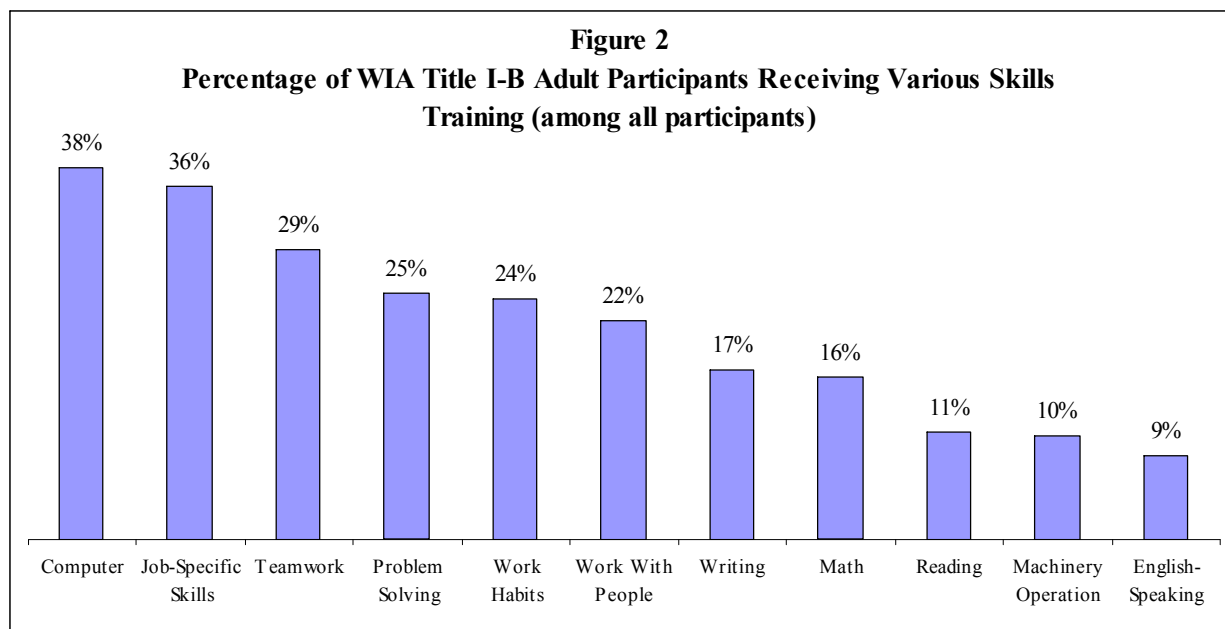
Most participants enroll in the WIA Adult program for employment-related reasons. Based on survey results, 80 percent of adults entered the program in order to learn skills for a new job, 73 percent enrolled to get job search assistance, and 56 percent enrolled for on-the-job training.⁵² About one fifth of the participants said they enrolled to improve basic skills (reading, math, and/or English speaking).

Fifty-nine percent of WIA adults reported receiving some type of training as part of their program. As in the previous study, the most common type of training was in computer and job specific skills (Figure 2).

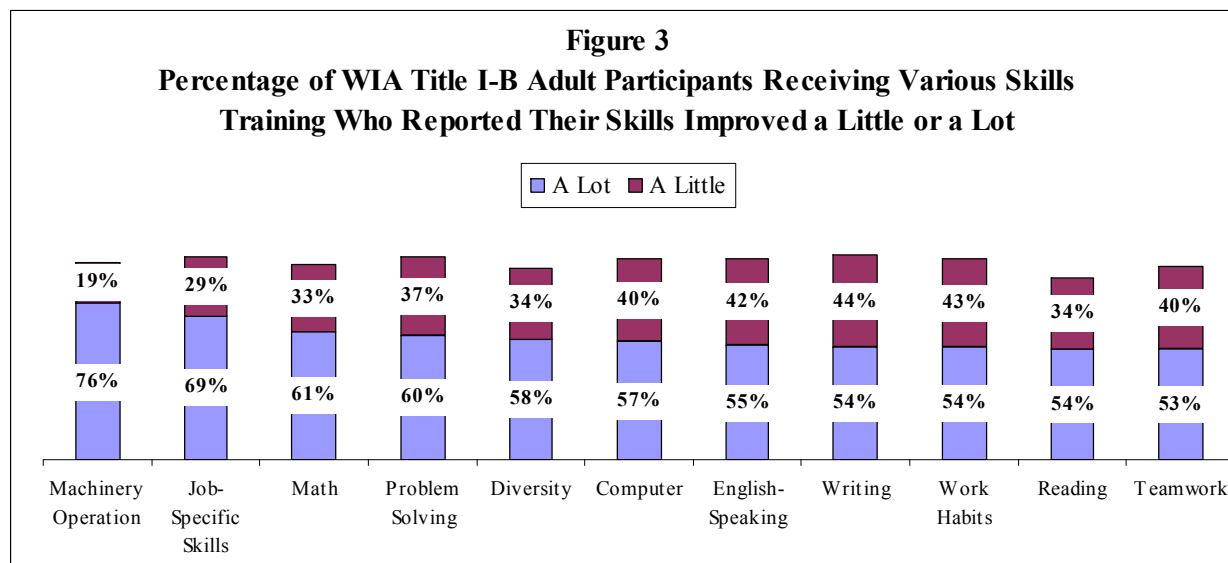
⁵⁰ According the 2004 *Washington State Population Survey*, of those ages 16-74, 11 percent have less than the equivalent of a high school diploma, and 63 percent had attended college.

⁵¹ Public assistance recipients includes 6.5 percent who received cash assistance from state or local General Assistance, Refugee Cash Assistance, or Supplemental Security Income; 3.3 percent who received Temporary Aid for Needy Families assistance; and 0.3 percent who received both types of assistance.

⁵² Participants can indicate more than one reason for enrolling.



The large majority of WIA adult participants who received training felt it improved their skills (Figure 3). Similar to two years ago, the percentage reporting their skills improved “a lot” was highest for occupational training, particularly machinery operation and job-specific skills. The majority of participants indicated “a lot” of improvement in reading, writing, and work habit skills, unlike two years ago when less than the majority so indicated.



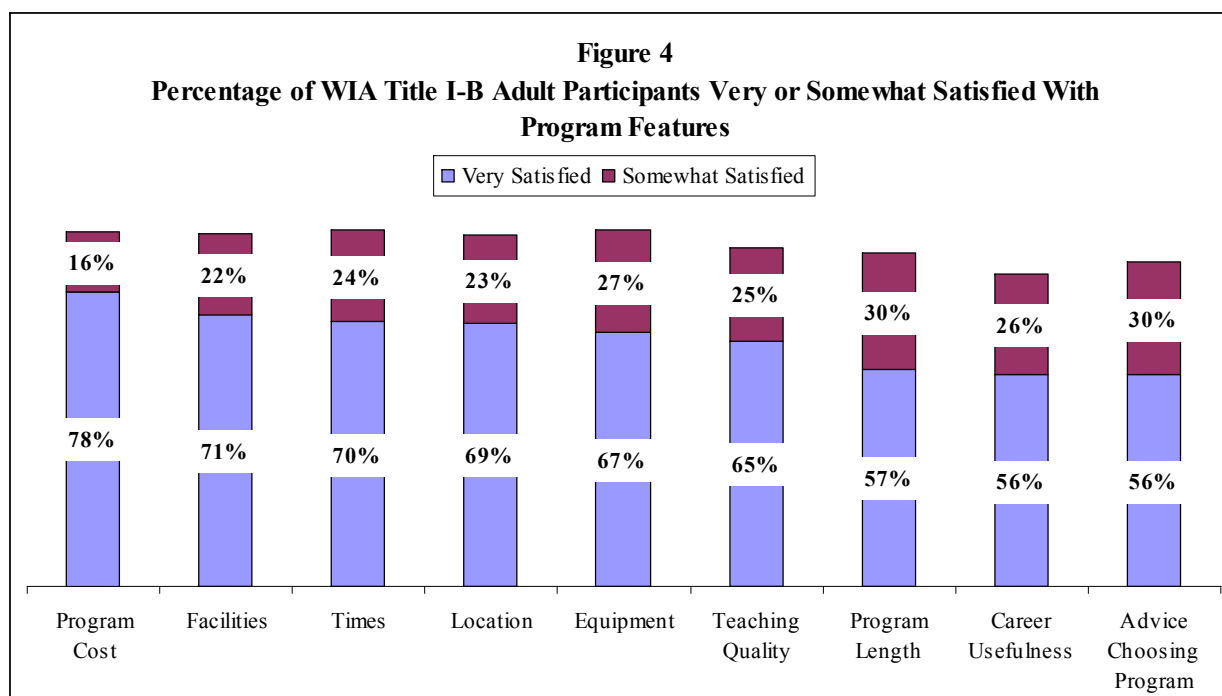
Among those employed seven to nine months after leaving the WIA Adult program, 59 percent said their training was related to that job, down from 63 percent reported by adults two years ago.

Administrative records data provide additional information on training received by WIA participants.⁵³ These data suggest 42 percent of the WIA adults leaving the program during 2003-2004 received occupational skills training as part of their program.⁵⁴ Eleven percent received on-the-job training.⁵⁵ (Note that participants can receive more than one type of training.)

These data also included information on degree or credential attainment. Among those leaving the program during 2003-2004, 5 percent received an associate degree, 10 percent received occupational skills licenses, and 26 percent obtained an occupational skills certificate/credential.

Participant Satisfaction

Survey results indicate participants were generally satisfied with the program. Eighty-six percent of participants reported they were satisfied with the overall quality of the program. Eighty-three percent said their educational objectives had been met. These are virtually the same levels of satisfaction that were reported in the last survey (2001-2002). Participants tended to be “very satisfied” with various features of the program including program cost, facilities, times offered, and location (Figure 4). They were less satisfied with their opportunity to interact with instruction outside of their program.

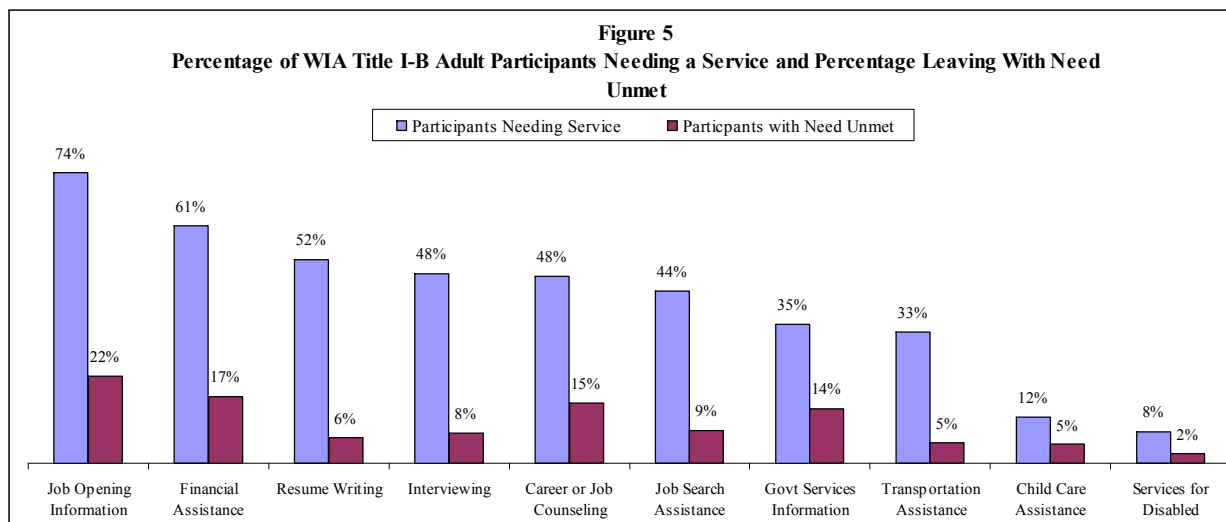


⁵³ These data are collected through the SKIES data reporting system developed by ESD.

⁵⁴ Occupational skills training in the administrative records data could include the following types of services: occupational skills training, programs that combine workplace training with related instruction; training programs operated by the private sector, skill upgrading and retraining, entrepreneurial training, job readiness training, and customized training.

⁵⁵ On-the-job training refers to training provided by an employer to a paid participant engaged in productive work that (a) provides knowledge or skills essential to the performance of the job; (b) provides reimbursement to the employer or up to 50 percent of the wage of the participant; and (c) is limited to the period of time required for a participant to become proficient in the occupation.

Similar to previous surveys, WIA adults most frequently reported needing information on job openings and financial assistance (Figure 5).

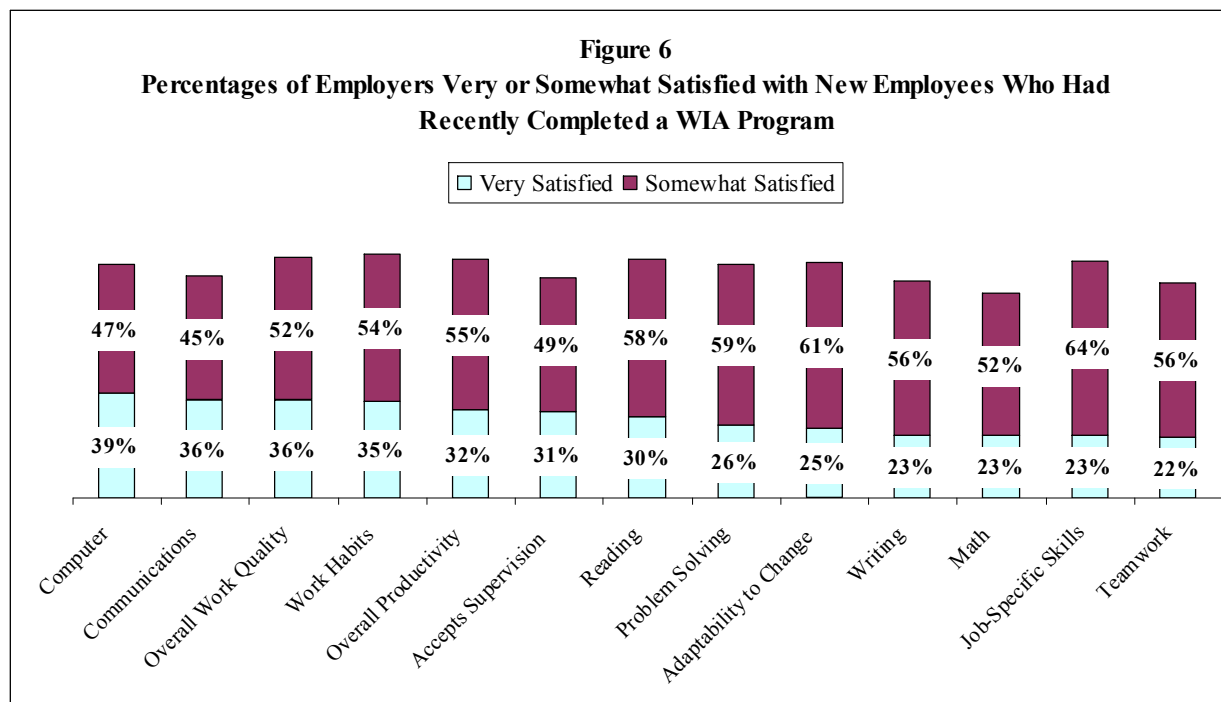


Most of those needing these support services received them. The largest unmet need was for information about job openings. This is not a new problem; the percentage has been about the same in previous survey.

Employer Satisfaction

It was not feasible to survey employers about each of the WIA programs included in the study (Adult, Dislocated Worker, and Youth programs) separately because there were too few individuals coming out of each program for a sufficient percentage of employers in the state to have had experience employing recent participants. Employers were instead asked about workers who had been trained by WIA. This section presents findings on employer satisfaction with new employees who completed any type of WIA program.

Overall, the results indicate the majority of employers were satisfied with the quality and productivity of these workers (Figure 6). Nevertheless, the percentage indicating being “very satisfied” was lower in this survey than in the previous.



There were mixed results in terms of being “very satisfied” with general workplace skills, occupational skills, and basic skills. While relatively higher percentages of employers were “very satisfied” with computer and workplace skills of communication and work habits, low percentages were “very satisfied” with teamwork, job-specific, math, and writing skills of WIA participants.

Employment and Earnings

Eighty-two percent of the 2003-2004 WIA Adult participants reported being employed during the period seven to nine months after the program (Figure 7).⁵⁶ To find out more about the students’ postprogram employment and earnings, we matched student records with ESD wage files from Washington, Idaho, and Oregon. Federal employment records were also included in the match. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

⁵⁶ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

Figure 7
Employment and Earnings of WIA Title I-B Adult Participants in the Third Quarter After Leaving Program

	1995-96*	1997-98*	1999-00*	2001-02	2003-04
Percentage self-reporting employment during third quarter after leaving program	81	79	83	81	82
Percentage with employment reported by employers to ESD the third quarter after leaving program	61	71	67	66	69
Median quarterly hours worked of those working	397	429	424	430	440
Percentage employed full-time of those working (averaging 30 or more hours/week)	51	54	53	57	58
Median annualized earnings of those working	\$13,549	\$16,475	\$16,672	\$17,630	\$18,352
Size of household in which median earnings would support at poverty level	2.2	3.1	3.2	3.5	3.7
Size of household in which median earnings would support at twice poverty level	0.7	0.9	0.9	0.9	1.0
Median hourly wage of those working	\$8.87	\$9.93	\$10.44	\$10.77	\$10.93
Percentage self-reporting receipt of medical benefits from employer	51	53	65	59	56
Percentage self-reporting receipt of pension benefits from employer	23	29	31	34	31
Notes: Earnings and wages are expressed in first quarter 2003 dollars. Poverty levels based on federal poverty guidelines identified by the Department of Health and Human Services for 2003. *Figures from 1995 through 2000 are for the JTPA II-A Adult program.					

Record matches found 69 percent had reported employment during the third quarter after they left the program. Their median hourly wage⁵⁷ was \$10.93, and their median annualized earnings were \$18,352. Labor market outcomes for those leaving the WIA adult program in 2003-2004 were better than for those leaving in 2001-02 and extends the decreasing trends starting from 1995-96.

Postprogram employment among WIA Title I-B adults continues to be concentrated in retail trade and services industries. The share of employment, however, is down from the previous study in retail trade and up in services, particularly in health care service industries (Figure 8).

⁵⁷ All wages and earnings are stated in first quarter 2005 dollars.

Figure 8 Industry of Employment of WIA Title I-B Adults in the Third Quarter After Leaving Program	
Industry Group	Employment
Natural Resources and Mining	1.7%
Construction	5.1%
Manufacturing	9.2%
Transportation and Warehouse and Utilities	4.7%
Wholesale Trade	3.0%
Retail Trade	11.3%
Financial Activities	5.2%
Services	55.6%
Professional, Scientific, and Technical	2.8%
Administration and Support and Waste Management and Remediation	12.1%
Education	3.3%
Health Care	17.5%
Social Assistance	4.8%
Arts, Entertainment, and Recreation	2.1%
Accommodation and Food Services	7.4%
All Other Services	5.7%
Public Administration	2.9%
Total	100%

Employment outcomes and earnings varied somewhat by gender, race and ethnicity, and disability status. During the third quarter after leaving the program, female and male participants were as likely to be employed and working full-time. Among those employed, however, the hourly wage rate for women was 92 percent of men. The good news is that this is up from 87 percent for those leaving in 2001-2002.

Participants from racial and ethnic minority backgrounds were as likely to be employed and working full-time as white participants. The median hourly wage for African Americans was 92 percent of white.

Administrative records suggest 9 percent of the WIA Title I-B adults included in this study had a disability. These participants were less likely to have employment reported to ESD (57 versus 70 percent) and their median wage was 91 percent of those without a disability.

Areas for Improvement

WIA Title I-B adult program participants were generally satisfied with the program. Labor market outcomes for adults leaving WIA during 2003-2004 compared favorably to those leaving in 2001-2002. Postprogram employment rates and earnings were slightly higher.

There are, nevertheless, areas for improvement. While most participants were satisfied with the services they received, many reported an unmet need for information on job openings. This is an unmet need also expressed by participants leaving in 2001-2002.

Although earnings increased from those reported two years ago, more could be done to prepare participants for higher wage jobs. Only one-third of WIA adults received job-specific skills training.

Given the low educational attainment of participants prior to entering the program, more should receive basic skills instruction in reading, writing, and math. Among the adults leaving WIA during 2003-2004, less than one-fifth said they received training in writing or math skills, and only 11 percent were trained in reading skills. Furthermore, only about half of these participants reported their reading and writing skills in these areas improved substantially; 61 percent reported their math skills improved “a lot.”

Division of Vocational Rehabilitation

DVR offers services to help individuals with disabilities become employed. The primary objective is employment. Depending on the individual and their functional limitations this may include part-time employment, self-employment, homemaking, or supported employment. Services are based on the needs of the individual and include but are not limited to assessment, counseling, vocational, academic, and other training services, physical and mental restoration services, assistive technology, independent living services, mobility and transportation, communication services, and job search and placement.

Eligibility requires certification by DVR that the individual:

- Has a physical, mental, or sensory impairment that constitutes or results in a substantial impediment to employment.
- Can benefit in terms of an employment outcome from the provision of vocational rehabilitation services.
- Requires vocational rehabilitation services to prepare for, enter into, engage in, or retain employment.

These strict eligibility requirements should be considered when reviewing the outcomes of DVR clients.

This study includes information from administrative records for 4,434 clients who left DVR programs during the 2003-2004 program year. The median length of program enrollment among those leaving DVR programs in 2003-04 was 21 months.

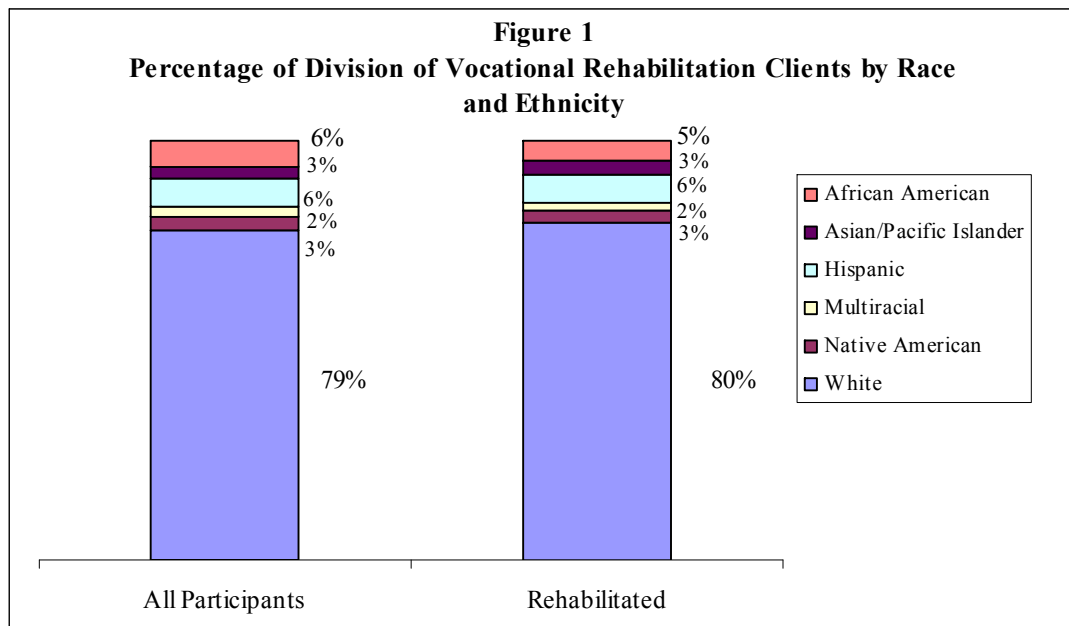
Significant programmatic changes need to be considered when comparing outcomes for DVR clients over time. The most important of these is the adoption of order of selection. Since the end of 2000, when program funds and staff resources are insufficient to serve all eligible applicants, priority has been given to participants with the most significant disabilities: priority 1 is individuals with **most severe disabilities**, priority 2 is individuals with **severe disabilities**; and priority 3 is individuals with **disabilities**. Of the DVR clients leaving the program during 2003-2004, 59 percent were priority 1; 40 percent were priority 2; and 1 percent were priority 3.

This study includes information from DVR administrative records; ESD wage files from Washington, Idaho, and Oregon; and federal employment records. In addition, 195 clients completed a survey, providing more detailed data on employment and satisfaction with the program.⁵⁸

⁵⁸ Responses from the participant survey were weighted to reflect the closure status—"Rehabilitated" versus "Other than Rehabilitated"—distribution of those leaving the program in 2003-04.

Participant Characteristics

The racial and ethnic composition of the 2003-2004 clients roughly reflects of the general population (Figure 1).⁵⁹ They also make up a similar percentage of those rehabilitated.



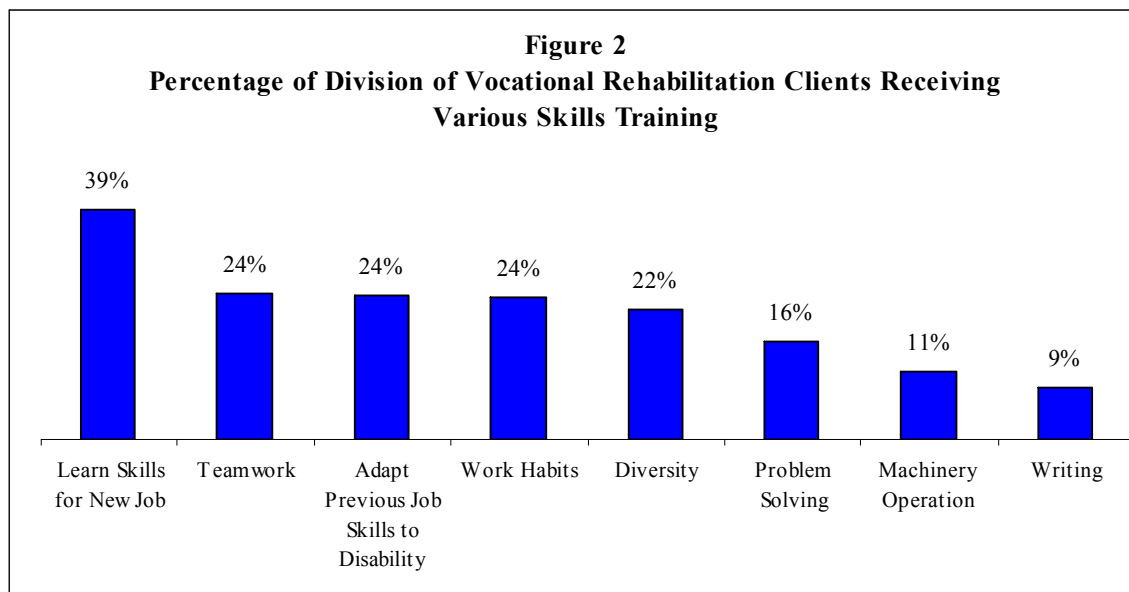
Forty-six percent of the 2003-2004 clients were women, similar to the percentage of the 2001-2002 clients. Of those rehabilitated, 43 percent were women. The median age upon entering the program was 38; one quarter was age 47 or older. At the time of application, 69 percent had not previously had postsecondary education, 15 percent had postsecondary education but no degree or certificate, 9 percent had an associate degree or a vocational certificate, and 7 percent had a bachelor's degree or higher.

Competency Gains

Forty-one percent of the DVR clients were classified as rehabilitated upon leaving the program (i.e., they were working for 90 days prior to exit). This rehabilitation rate is slightly lower than the 49 percent reported two years ago.

⁵⁹ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.

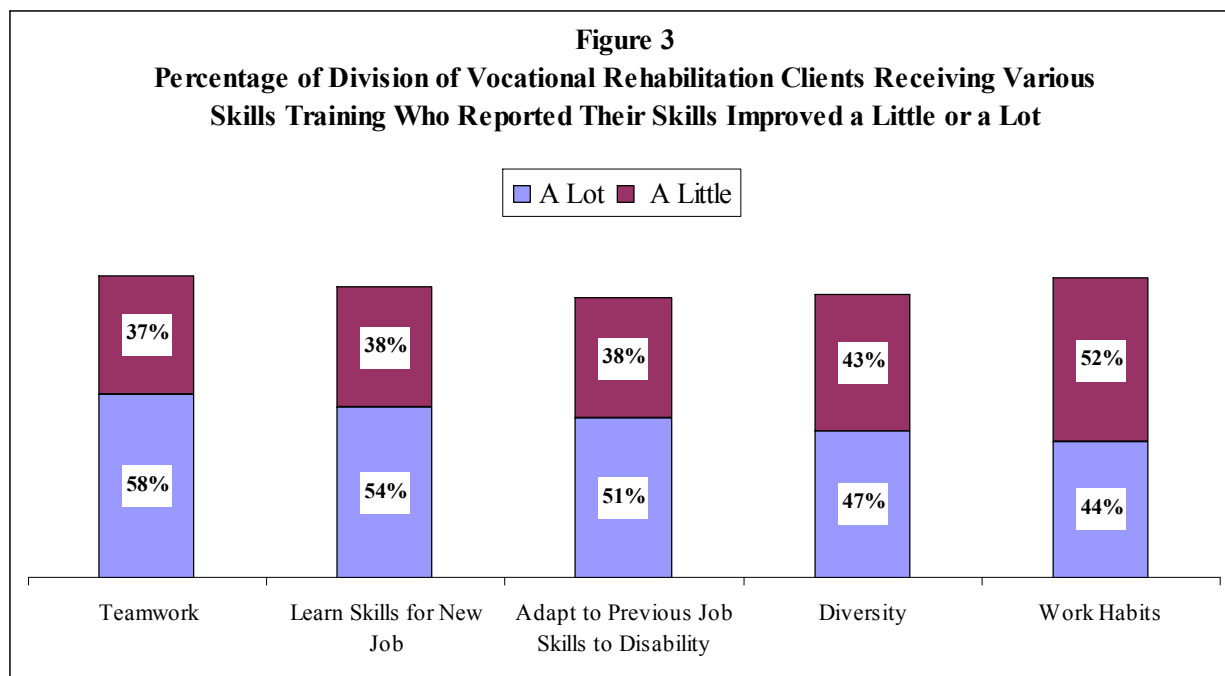
Based on survey results, most DVR clients enrolled in the program to learn skills for a new job (79 percent) and to get job search assistance (77 percent).⁶⁰ Clients indicated receiving these and other types of training (Figure 2). In addition, DVR offers other work-related services in addition to training; for example, some clients receive physical and mental restoration services, assistive technology, and communication services.



As in the previous study, almost all clients who received a particular type of training reported at least some improvement in their skills (Figure 3).⁶¹ Comparisons indicate that similar percentages indicated “a lot” of improvement across the skills with the exception of work habits in which a much lower percentage of the 2003-2004 clients so reported.

⁶⁰ Note that respondents could select more than one reason for enrolling in the program.

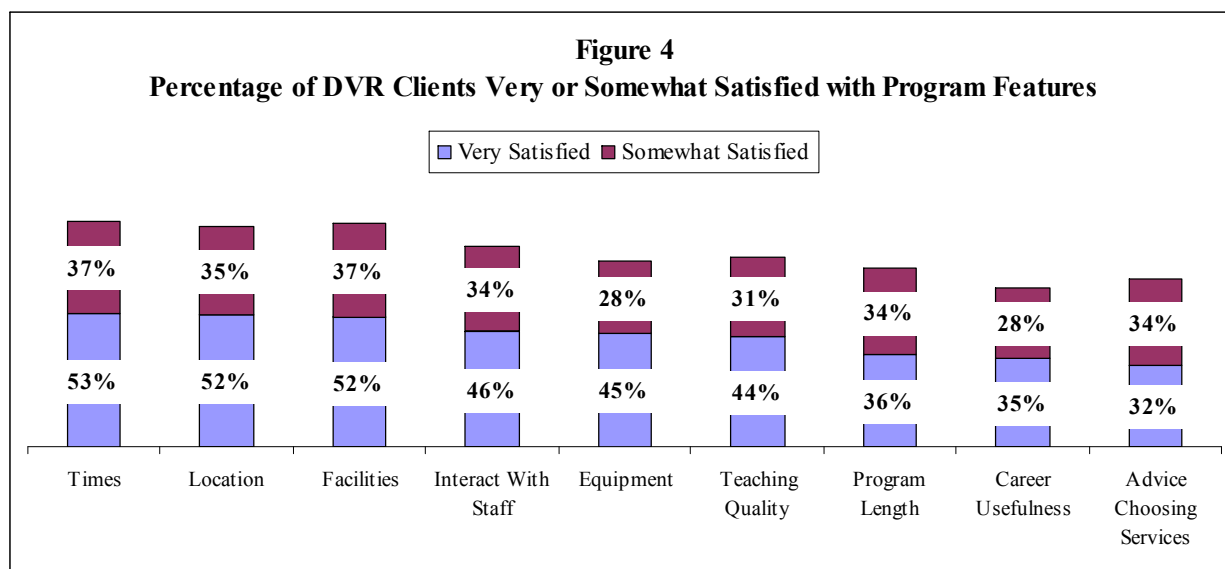
⁶¹ In the survey, too few clients indicated receiving problem-solving, machinery operation, and writing skills training to reliably assess the levels of improvement and, therefore, are not included in Figure 3.



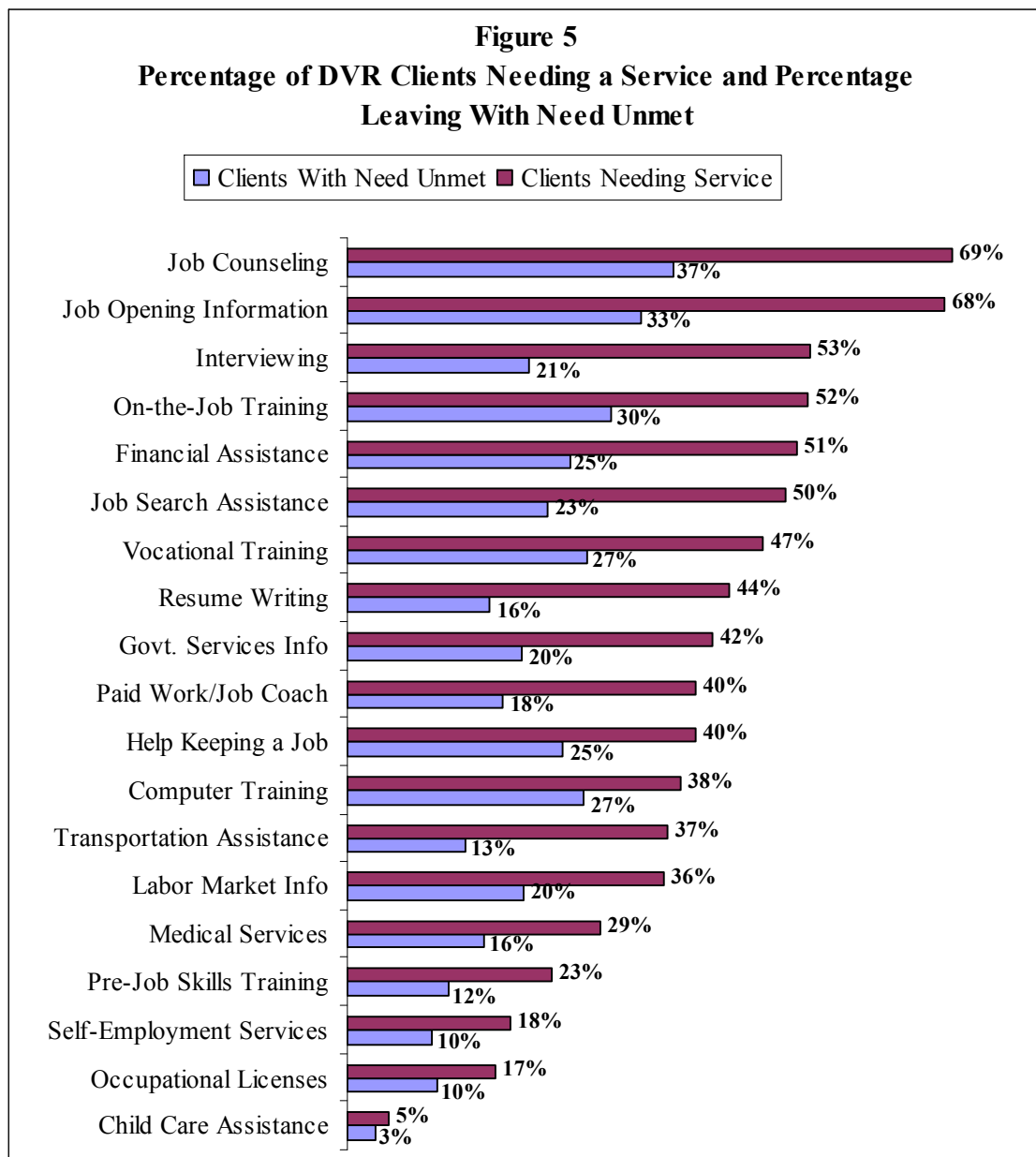
Among those employed in the third quarter after leaving their program, 70 percent indicated that their training was related to their job.

Participant Satisfaction

Sixty-three percent of clients said they were “very satisfied” or “somewhat satisfied” with their DVR program, down from sixty-nine percent who reported two years ago. As in the previous study, respondents reported relatively high levels of satisfaction with location, times, and the facilities (Figure 4). Satisfaction was lower with respect to advice on choosing services and usefulness of the program to their careers.



Similar to two years ago, DVR clients indicated job counseling and information about job openings as the support services more in need while participating in the program (Figure 5). While most clients had their support service needs met, as in the past, considerable percentages left with an unmet need for job counseling, information about job openings, and on-the-job training.



Employment and Earnings

According to the survey responses, 40 percent of the 2003-2004 clients were employed during the period seven to nine months after leaving their program (Figure 6).⁶² To find out more about the clients' postprogram employment and earnings, we matched client records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

Record matches found 41 percent had reported employment during the third quarter after they left the program. The median hourly wage⁶³ was \$9.43, and the median annualized earnings was \$11,090.

Figure 6
Employment and Earnings of DVR Clients in the Third Quarter After Leaving Program

	1997-98		1999-2000		2001-2002		2003-2004	
	All	Rehabilitated	All	Rehabilitated	All	Rehabilitated	All	Rehabilitated
Percentage self-reporting employment during third quarter after leaving program	Na	na	60	na	52	na	40	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	56	72	57	71	46	72	41	70
Median quarterly hours worked of those working	381	400	377	397	310	346	299	323
Percentage employed full-time (averaging 30 or more hours/week) of those working	49	51	48	51	43	46	39	43
Median annualized earnings of those working	\$13,366	\$14,317	\$14,097	\$14,749	\$12,955	\$14,450	\$11,090	\$12,478
Size of household in which median earnings would support at poverty level	2.2	2.5	2.4	2.6	2.0	2.5	1.5	1.9
Size of household in which median earnings would support at twice poverty level	0.7	0.7	0.7	0.8	0.7	0.8	0.6	0.7
Median hourly wage of those working	\$9.25	\$9.40	\$9.85	\$9.93	\$10.32	\$10.53	\$9.43	\$9.46
Percentage self-reporting receipt of medical benefits from employer	na	na	40	na	44	na	37	na
Percentage self-reporting receipt of pension benefits from employer	na	na	22	na	25	na	18	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.								

Those deemed rehabilitated upon leaving the program (i.e., those who had been working for 90 days) tended to have better employment and earnings outcomes than those not considered rehabilitated.

DVR clients leaving in 2003-2004 tended to have lower employment rates and earnings than those leaving in 2001-2002. The order-of-selection policy may have contributed to these declines.

Employment among DVR clients continues to be heavily concentrated in retail trade and services industries (Figure 7).

⁶² In the survey, clients were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

⁶³ All wages and earnings are stated in first quarter 2005 dollars.

Figure 7	
Industry of Employment of DVR Clients in the Third Quarter After Leaving Program	
Industry Group	Employment
Natural Resources and Mining	1.8%
Construction	3.6%
Manufacturing	4.9%
Wholesale Trade	2.2%
Retail Trade	17.3%
Food and Beverage Stores	5.5%
Gasoline Stations	1.1%
General Merchandise Stores	4.3%
All Other Retail Trade	6.4%
Transportation and Warehouse and Utilities	3.7%
Information	1.8%
Financial Activities	2.9%
Services	58.0%
Administration and Support and Waste Management and Remediation	10.3%
Education Services	5.6%
Health Care	10.6%
Social Assistance	9.2%
All Other Services	22.3%
Public Administration	3.8%
Total	100%

Gender differences in postprogram employment and earnings are not significant. There is less variation in labor market outcomes by race and ethnicity among DVR clients than participants in many other programs. There are, however, some significant differences. Employment rates are significantly lower for African American (32 percent) clients than for whites (41 percent). Median annual earnings are also lower for African Americans (\$9,804) and Native Americans (\$10,290) than for whites (\$10,812).

Areas for Improvement

When considering labor market outcomes, remember every DVR client faces substantial impediments to employment. Moreover, the severity of these impediments increased after the adoption of order of selection toward the end of 2000. As is the case in several other programs, DVR clients report a substantial unmet need for job counseling services and information about job openings. Relatively high percentages of the clients also report an unmet need for job counseling, information about job openings, and on-the-job training.

The majority (54 percent) who received job-specific training for a new job reported their skills improved “a lot.” A similar proportion (51 percent) reported substantial improvement in adapting previous job skills.

Department of Services for the Blind

DSB programs provide vocational rehabilitation services, including information, assessment, and referral; vocational counseling, including guidance, referral, and placement; and rehabilitation training in adaptive skills, job skills, and assistive technology. Occupational licenses, tools, equipment, technological aids, and other goods and services that can be reasonably expected to help participants achieve successful employment outcomes are also provided. In order to receive services, an individual must be legally blind or have a visual disability that causes an impediment to employment, and vocational rehabilitation services are required for the individual to prepare for, enter, engage in, or retain employment.

The study includes information from administrative records for the 239 clients who left DSB programs during the 2003-2004 program year. The median length of program enrollment was 17 months.

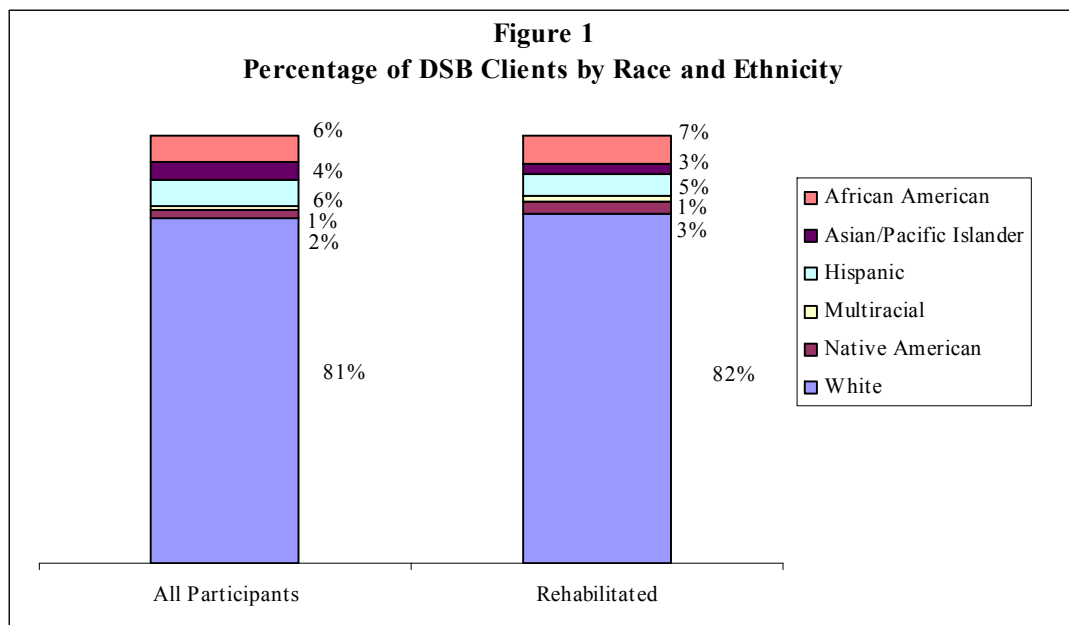
This study also collected information from ESD wage files from Washington, Idaho, and Oregon, and federal employment records. In addition, 89 clients completed a participant survey, providing more detailed data on employment and satisfaction with the program.⁶⁴

Participant Characteristics

The racial and ethnic composition of the 2003-2004 clients roughly reflects of the general population (Figure 1).⁶⁵ They also make up a similar percentage of those rehabilitated.

⁶⁴ The responses from the participant survey were weighted to reflect the closure status—"Rehabilitated" versus "Other than Rehabilitated"—distribution of those leaving the program in 2003-04.

⁶⁵ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.



Forty-one percent of the 2003-2004 DSB clients were women, similar to the forty-five percent of the 2001-2002 clients. The median age upon entering the program was 41; one quarter of the clients were over age 50. At the time of application, 41 percent had not previously had postsecondary education, 21 percent had postsecondary education but no degree or certificate, 11 percent had an associate degree or a vocational certificate, and 27 percent had a bachelor's degree or higher.

Competency Gains

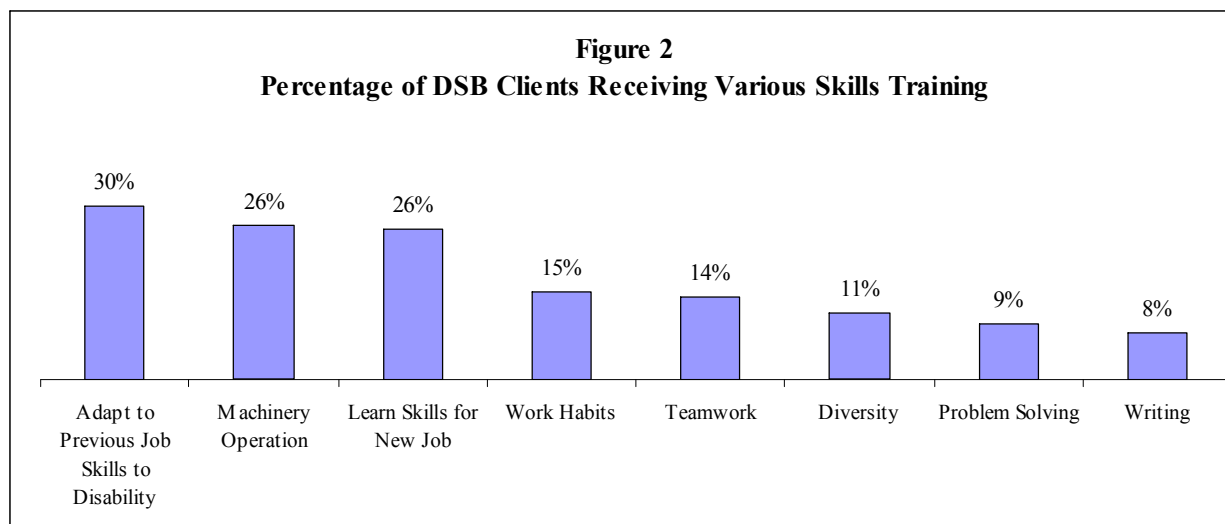
Fifty-seven percent of DSB clients were classified as rehabilitated upon leaving the program (i.e., they were working for at least 90 days prior to leaving the program), slightly lower than the sixty-three percent of those leaving the program in 2001-2002.

Based on survey results, most DSB clients (68 percent) enrolled in the program to obtain equipment or technology needed because of their disability. About half of all clients cited learning skills for a new job as one reason for enrolling.⁶⁶

DSB clients were more likely to report receiving training in technical skills rather than workplace or basic skills (Figure 2).⁶⁷

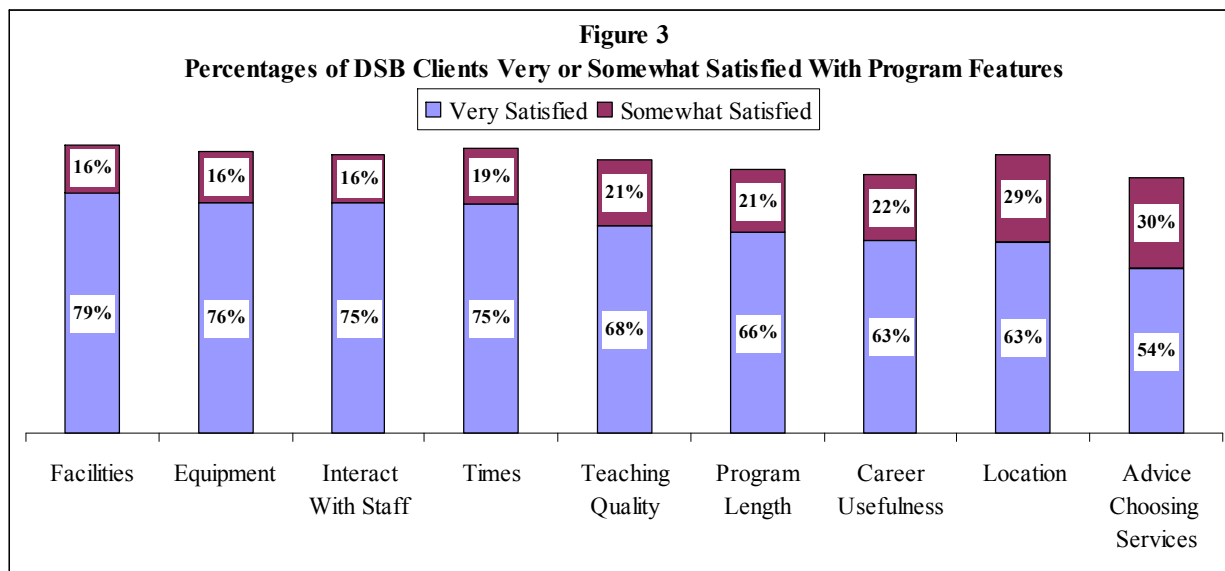
⁶⁶ Respondents were allowed to indicate more than one reason for enrolling.

⁶⁷ The number of clients who reported receiving training in the various areas were too small to reliably assess extent of improvement.



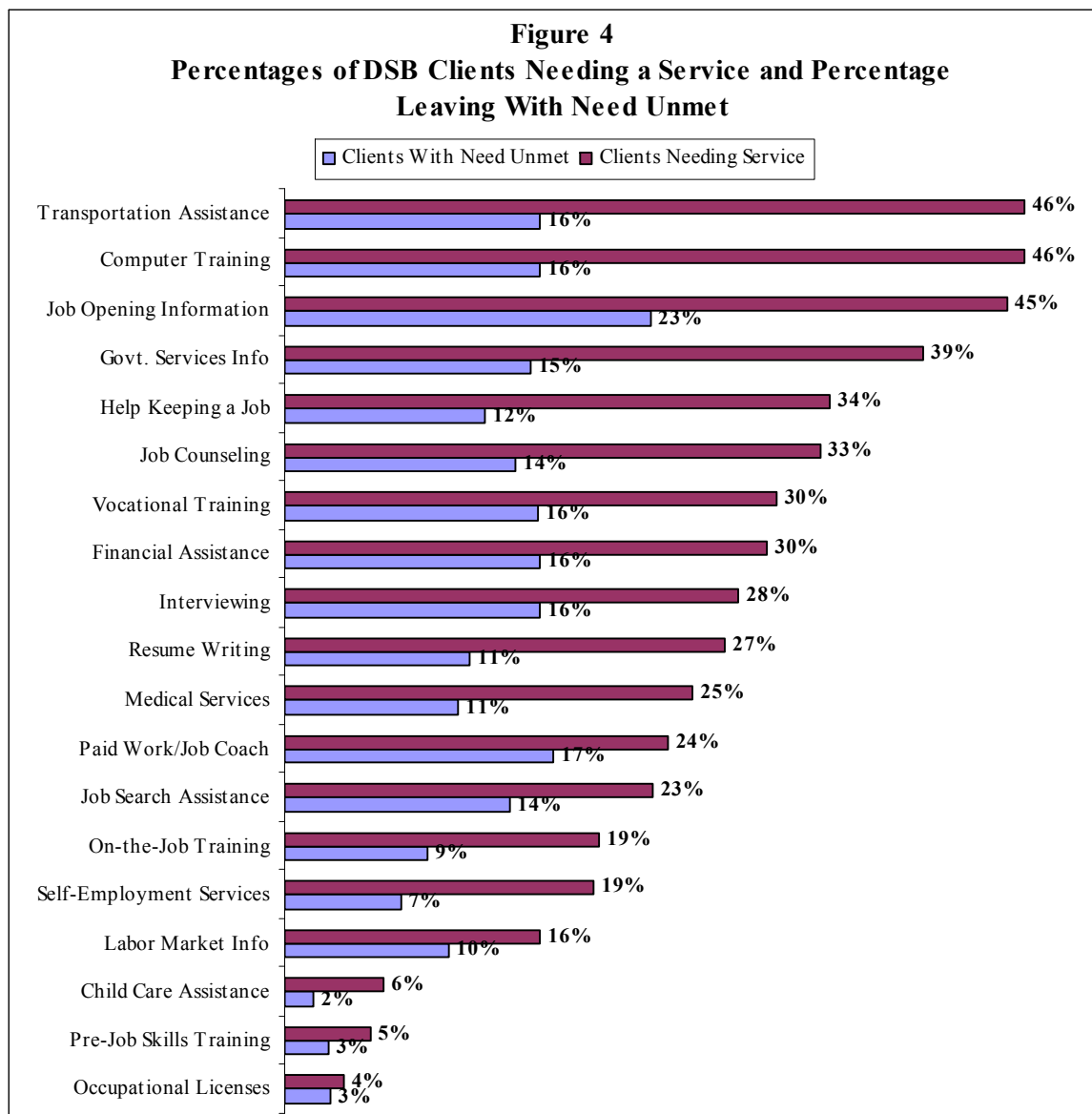
Participant Satisfaction

Eighty-seven percent of clients said they were “very satisfied” or “somewhat satisfied” with their DSB program, up from the eighty-one percent of the 2001-2002 DSB clients. Over three-fourths of the respondents were “very satisfied” with the facilities, equipment, times, and the opportunity to interact with staff (Figure 3). Satisfaction was lowest with respect to advice on choosing services.



Similar to two years ago, DSB clients indicated computer training, information about job openings, information about government services, and transportation assistance as the support services most in need while participating in the program (Figure 4).⁶⁸ Similar to two years ago, a relatively high percentage left with an unmet need for information about job openings.

⁶⁸ The number of respondents to the survey was small, 89, and, therefore, the percentages reported are relatively unstable. However, because the trends are so overwhelmingly positive, they are informative.



Employment and Earnings

According to the survey responses, 67 percent of the 2003-2004 clients were employed during the period seven to nine months after leaving their program (Figure 5).⁶⁹ To find out more about the clients' postprogram employment and earnings, we matched client records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

⁶⁹ In the survey, clients were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

Record matches found 49 percent of DSB clients had reported employment during the third quarter after leaving the program. Among those who were considered rehabilitated upon leaving the program (i.e., those who had been working for 90 days prior to exit), 72 percent had reported employment the third quarter after exit, a higher percentage than for the 2001-2002 clients.

Figure 5
Employment and Earnings of DSB Clients in the Third Quarter After Leaving Program

	2001-2002		2003-2004	
	All	Rehabilitated	All	Rehabilitated
Percentage self-reporting employment during third quarter after leaving program	70	N/A	67	N/A
Percentage with employment reported by employers to ESD during the third quarter after leaving program	41	62	49	72
Median quarterly hours worked of those working	430	430	411	425
Percentage employed full-time (averaging 30 or more hours/week) of those working	61	61	55	55
Median annualized earnings of those working	\$20,824	\$21,374	\$21,762	\$23,840
Size of household in which median earnings would support at poverty level	4.5	4.6	4.7	5.4
Size of household in which median earnings would support at twice poverty level	1.3	1.3	1.4	1.7
Median hourly wage of those working	\$14.10	\$14.50	\$12.68	\$12.99
Percentage self-reporting receipt of medical benefits from employer	62	N/A	53	N/A
Percentage self-reporting receipt of pension benefits from employer	46	N/A	37	N/A
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.				

Among clients who were working during the third postprogram quarter, the median hourly wage⁷⁰ was \$12.68, and they had a median annualized earnings of \$20,006. As expected, rehabilitated clients had better employment and earnings outcomes than all clients combined.

As in the past, employment among DSB clients is heavily concentrated in services, primarily education and health care and social assistance services (Figure 6).

Figure 6
Industry of Employment Among DSB Clients

Industry Sector	Percentage of Employment
Manufacturing	13.1%
Retail Trade	10.3%
Services	55.1%
Education Services	18.7%
Health Care	9.3%
Social Assistance	7.5%
Accommodation and Food Services	8.4%
All Other Services	11.2%
Public Administration	7.5%
All Other Industries	14.0%
Total	100%

⁷⁰ All wages and earnings are stated in first quarter 2005 dollars.

Females and males have similar employment rates and earnings outcomes. The median hourly wage for females, however, is about 89 percent of males.⁷¹

Areas for Improvement

When considering their labor market outcomes, remember DSB clients face substantial impediments to employment. Only 49 percent of clients had employment reported in ESD wage files during the third quarter after leaving the program.

Clients expressed high levels of satisfaction with various aspects of the program. While they tend to receive the support services they need while participating, as was the case in other programs, participants report substantial unmet need for information about job openings. A relatively high percentage of clients also report an unmet need for computer training.

⁷¹ Given the relatively small number of clients leaving the program each year, we do not have sufficient data to examine differences in labor market outcomes by race and ethnicity.

Secondary Career and Technical Education

CTE serves high school age youth in approximately 238 school districts and 10 vocational skills centers throughout the state. Its mission is to prepare students for successful roles in families, careers, and communities. Programs are designed to develop the skills, understanding, and attitudes needed by workers in their occupations. Instructional programs organized within career pathways include agriculture, family and consumer sciences, trade and industry, marketing education, business education, diversified occupations, technology education, cosmetology, health education, and others.

We limited our evaluation of this program, because of data limitations, to students who are identified by their districts as vocational completers (districts define a vocational completer as someone who completed a vocational sequence, whether or not the student earns a diploma).⁷² This strategy is different than the other program evaluations included in the study, which were not limited to completers only. This study focuses on 14,533 vocational completers who left their senior year during the 2003-2004 school year.⁷³

This study includes information from Office of Superintendent of Public Instruction (OSPI) student records; ESD wage files from Washington, Idaho, and Oregon; and federal employment records. Enrollment data from Washington community and technical colleges, public four-year institutions, and private career schools were analyzed to examine the extent to which career and technical students continued their education. In addition, 1,312 students completed a telephone survey, providing additional information on employment and satisfaction with the program.⁷⁴ Employer satisfaction information was collected through a survey conducted during the summer of 2005; 314 firms that hired new employees who recently completed vocational education responded to the survey.

Participant Characteristics

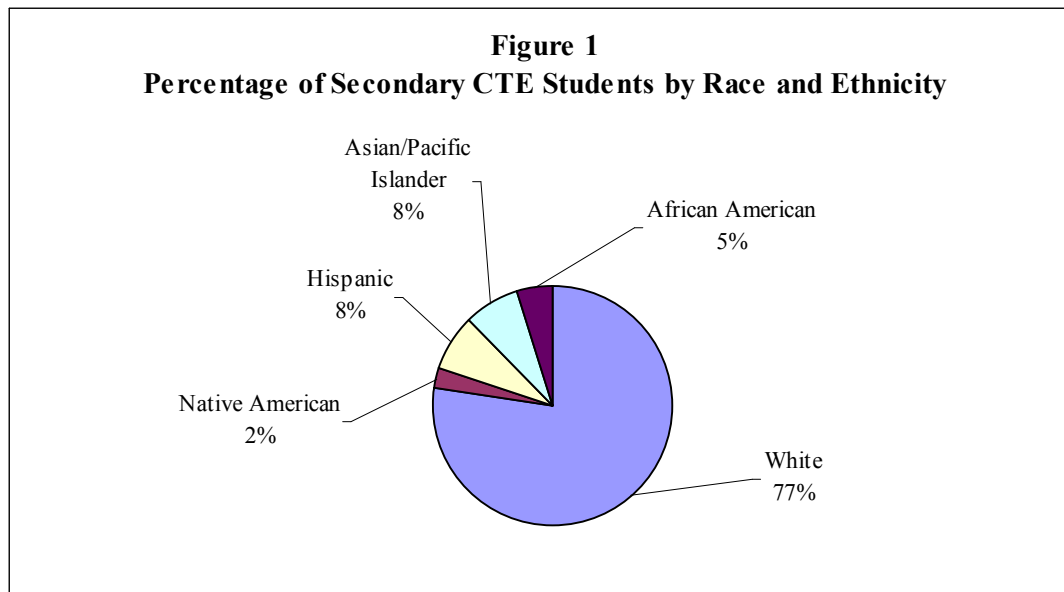
Career and technical education students are roughly as racially and ethnically diverse as the state population ages 16-19 (Figure 1).⁷⁵ Forty-eight percent were female.

⁷² The state defines a student who completes 360 hours of sequenced vocational classes as a vocational completer. The designation of who is a completer, however, does vary across some school districts. Smaller schools with fewer resources, for example, will offer the most complete sequence they can, but it may be fewer than 360 hours. These schools may still consider the students who finish the sequence to be completers.

⁷³ OSPI provided data on 14,860 seniors who left the system during the 2003-2004 school year and who were vocational completers at any time during their K-12 careers. Most of these students graduated (93 percent); however, some dropped out (4 percent), others left with an unknown status (3 percent), and 3 students were deceased. This study focused on the 14,533 who had completed their career and technical education program in their sophomore, junior or senior years, and who were not deceased.

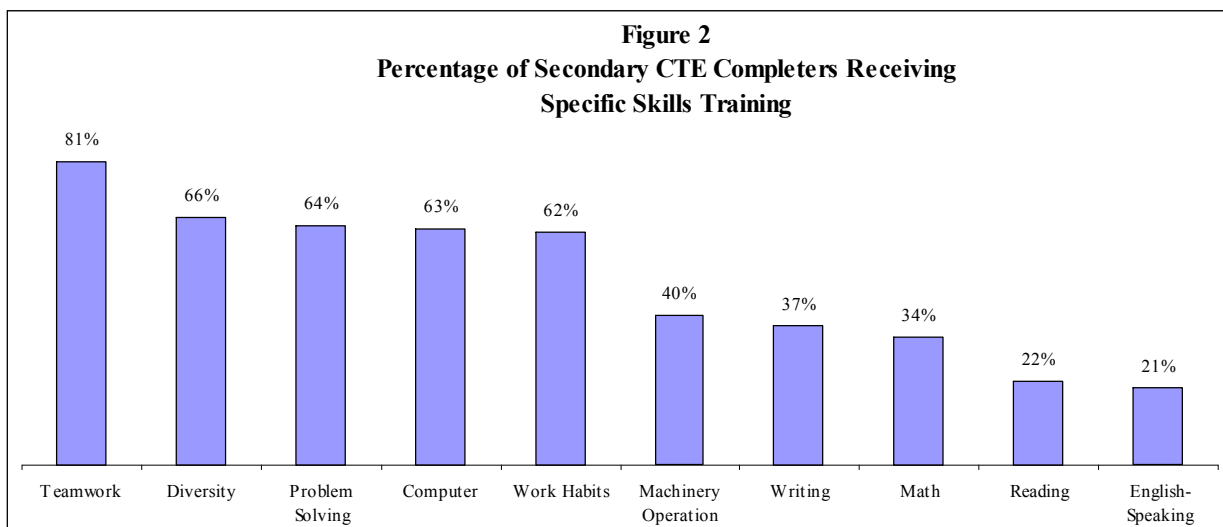
⁷⁴ The responses to the participant survey were weighted to reflect the distribution of secondary CTE completers across Workforce Development Areas.

⁷⁵ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.

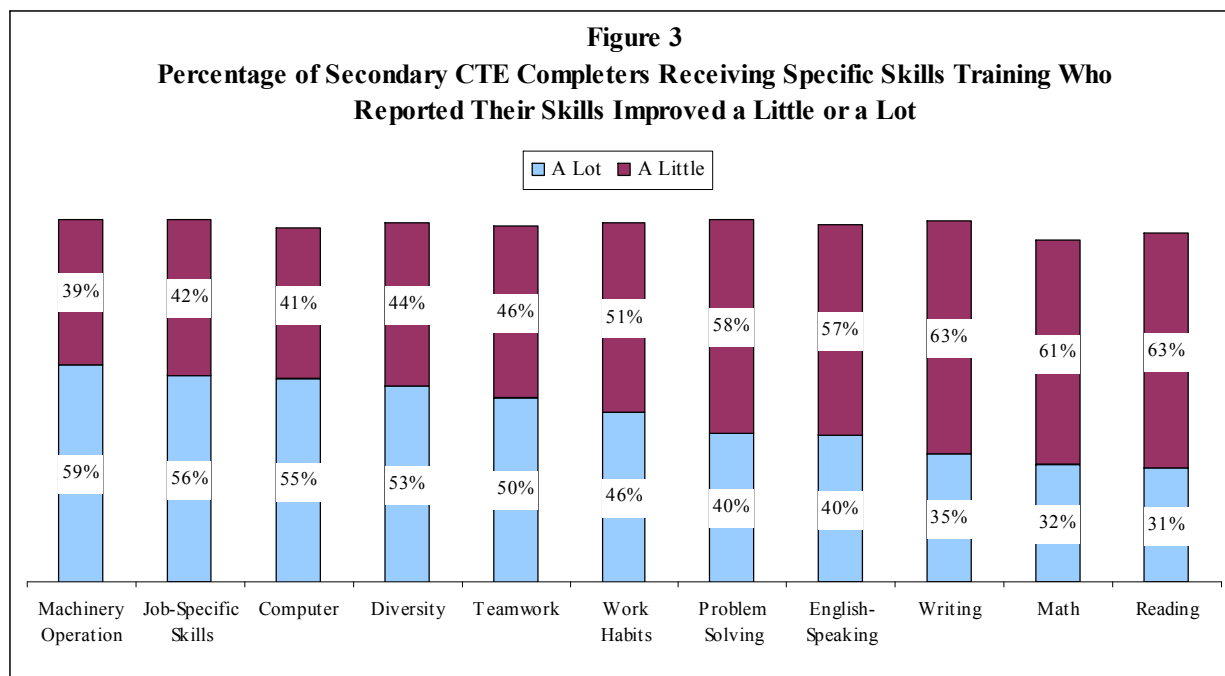


Competency Gains

According to the survey, 66 percent of students enrolled in secondary career and technical education to gain skills for a job. The highest percentages indicated personal improvement and to make school more interesting (94 percent and 83 percent, respectively) as their reasons for enrolling in CTE. CTE students indicated receiving training in many different skill areas in addition to job-specific skills (Figure 2).



Most students said their skills improved as a result of taking CTE classes (Figure 3). Similar to students from 2001-2002, higher percentages indicated “a lot” of improvement in technical and general workplace skills than so reported for basic skills.



Among students who were employed, 52 percent said their career and technical education was related to their job; about the same as was reported two years ago.

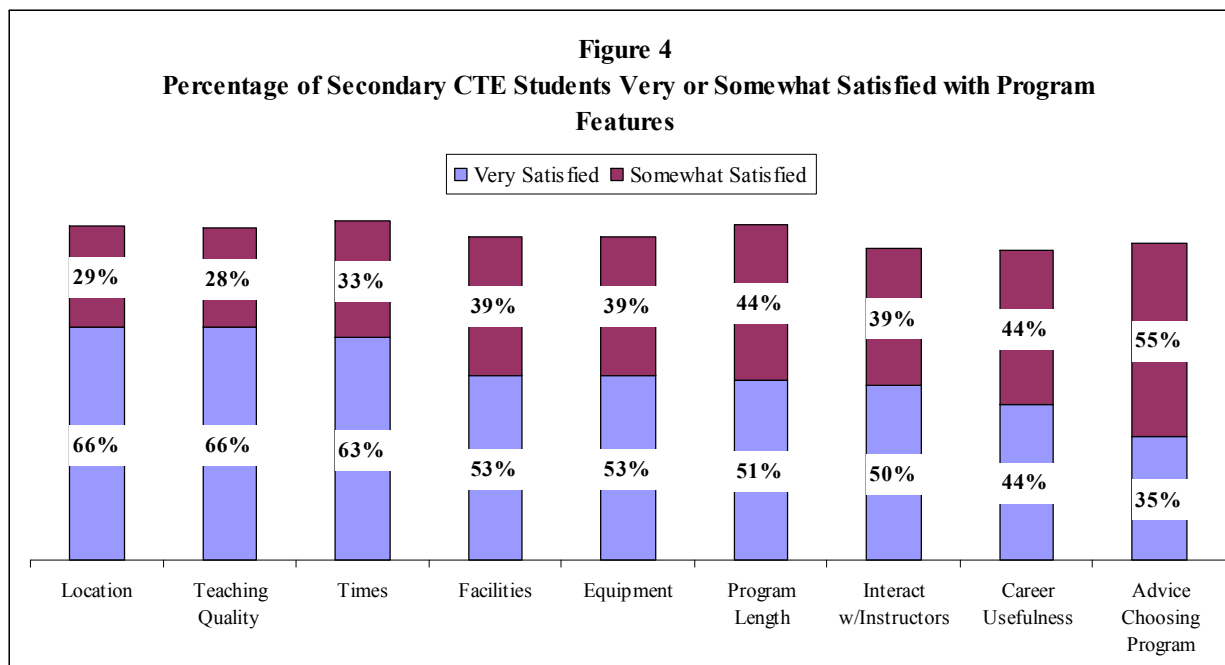
Many of the students continued their education at a community or technical college or public four-year university. In the third quarter after completing their program, 39 percent of the students were enrolled in postsecondary education.⁷⁶

Participant Satisfaction

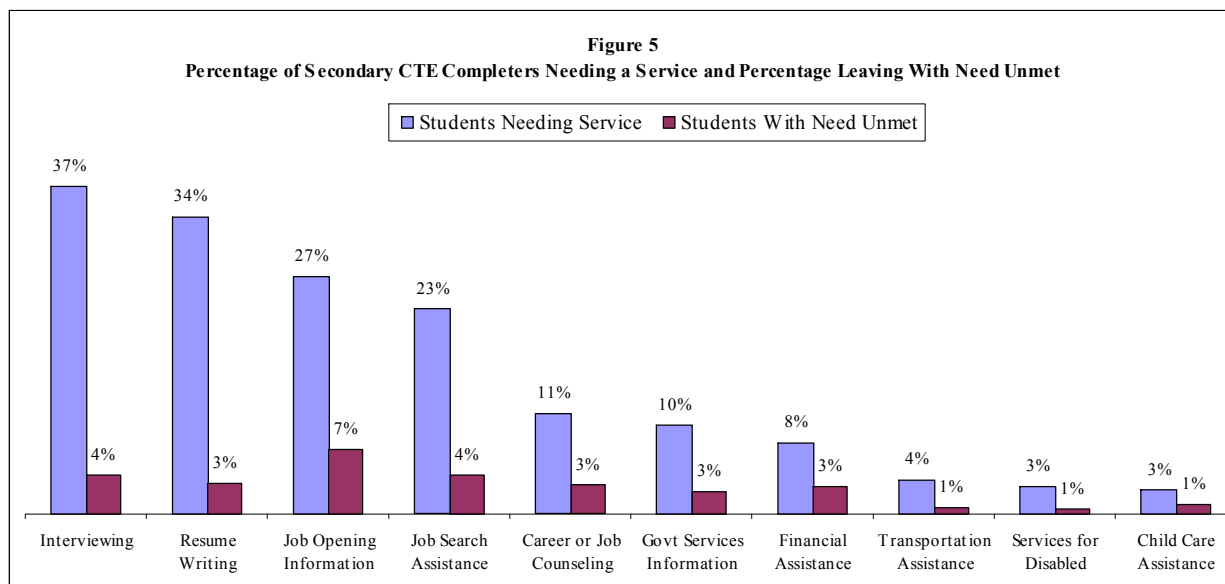
According to the survey, students were generally satisfied with their career and technical education programs. Ninety-five percent said the program met their objectives. Ninety-seven percent were satisfied with the program overall. These high levels of satisfaction are similar to those reported two years earlier.

About two-thirds of students were generally “very satisfied” with the quality of teaching and the location of classes (Figure 4). Satisfaction level was relatively lower with respect to advice on selecting a program, where just over a third indicated being “very satisfied.”

⁷⁶ Matches are made against enrollments at Washington’s community and technical colleges, public four-year institutions, and private career schools. However, in-state private four-year colleges and universities and out-of-state post-secondary enrollments are not included in the match. Therefore, the percentage enrolled in higher education may be understated.



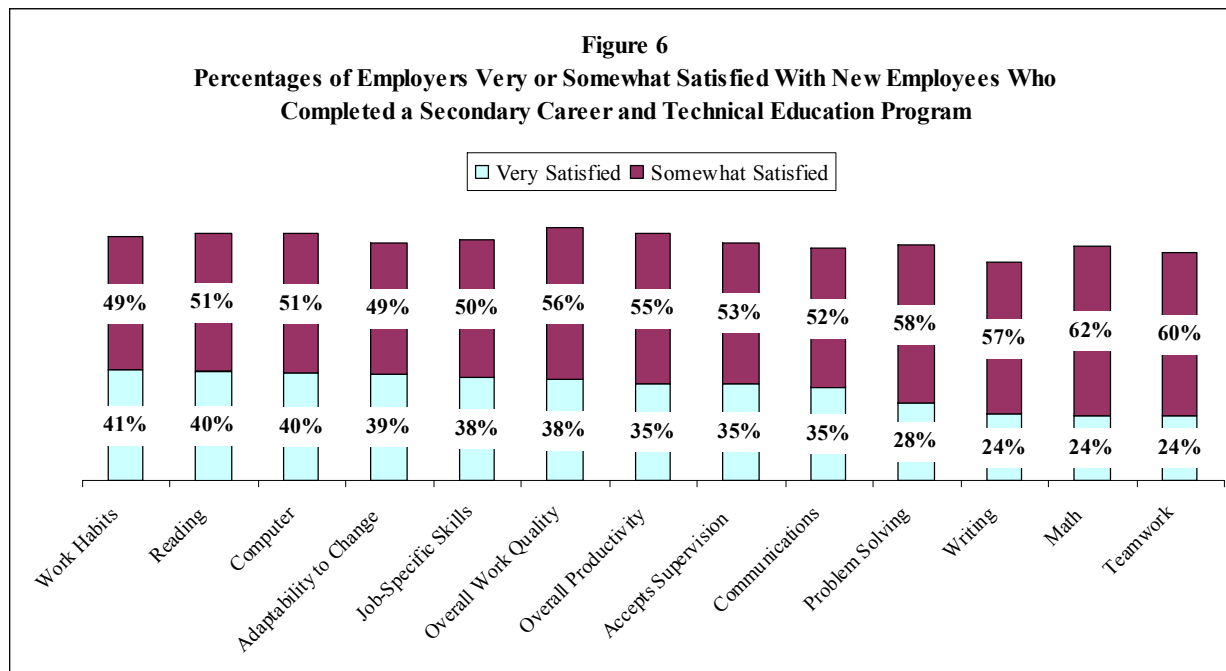
In general, high school CTE students reported needing fewer support services than other groups we studied, and when they did need these services, they generally received them (Figure 5). The services most frequently needed by students were assistance with job interviewing and resume writing.



Employer Satisfaction

The employer survey asked firms to evaluate new employees who recently completed a career and technical education program. Across skills areas, similar or higher percentages of employers were at least “somewhat satisfied” compared to the previous survey (Figure 6). While substantially higher percentages were “very satisfied” with their new employees’ computer and

problem-solving skills and work habits, however, substantially lower percentages were “very satisfied” with their teamwork skills and willingness to accept supervision.



Employment and Earnings

According to the survey, 67 percent of the 2003-2004 secondary CTE completers were employed during the period seven to nine months after leaving school (Figure 7).⁷⁷ To find out more about the students' postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

Record matches found 55 percent of 2003-2004 students had reported employment and 73 percent had either employment or were enrolled in higher education during the third quarter after leaving. The median wage⁷⁸ for Class of 2004 CTE completers was \$8.49 per hour and their median annualized earnings was \$8,456. Though this wage and earnings may seem low, it is important to remember these are young, entry-level workers.

Compared to all 2003-2004 students, those who were not in postsecondary education were more likely to work full-time, had a higher median wage, and, consequently, a higher median annualized earnings. Earnings and wages, however, have been declining since 1999-2000.

⁷⁷ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

⁷⁸ All wages and earnings are stated in first quarter 2005 dollars.

Figure 7
Employment and Earnings of Secondary CTE Students in the Third Quarter After Leaving Program

	1995-96	1997-98		1999-2000		2001-2002		2003-2004	
	All	All	Not Enrolled in School	All	Not Enrolled in School	All	Not Enrolled in School	All	Not Enrolled in School
Percentage self-reporting employment during third quarter after leaving program	80	79	na	75	na	74	na	67	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	68	62	na	58	na	58	na	55	56
Percentage with reported employment and/or enrolled in higher education		74	na	75	na	78	na	73	na
Median quarterly hours worked of those working	289	274	328	259	332	259	320	248	296
Percentage employed full-time (averaging 30 or more hours/week) of those working	33	29	37	29	41	28	38	26	35
Median annualized earnings of those working	\$8,383	\$8,988	\$10,708	\$8,668	\$11,017	\$8,800	\$10,777	\$8,456	\$10,035
Size of household in which median earnings would support at poverty level	0.9	0.9	1.1	0.9	1.2	0.9	1.1	0.9	1.0
Size of household in which median earnings would support at twice poverty level	0.4	0.5	0.6	0.5	0.6	0.5	0.6	0.4	0.5
Median hourly wage of those working	\$7.50	\$8.14	\$8.38	\$8.74	\$8.89	\$8.52	\$8.59	\$8.49	\$8.60
Percentage self-reporting receipt of medical benefits from employer	34	35	na	40	na	35	na	30	na
Percentage self-reporting receipt of pension benefits from employer	17	17	na	18	na	16	na	11	na
Notes: Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005.									

Employment of secondary career and technical education students continued to be heavily concentrated in retail trade and services industries (Figure 8). A substantially high percentage of CTE students were employed in accommodation and food services industries, particularly in full- and limited-service restaurants and snack and nonalcoholic beverage bars.

Figure 8 Industry of Employment of Secondary CTE Students During Third Quarter Prior to Program and Third Quarter After Program		
Industry Group	All Youth	Youth Not in Higher Ed
Natural Resources and Mining	1.6%	1.9%
Construction	4.6%	6.2%
Manufacturing	5.3%	7.2%
Wholesale Trade	2.3%	2.7%
Retail Trade	30.3%	27.4%
Motor Vehicle and Parts Dealers	2.8%	3.4%
Food and Beverage Stores	5.8%	5.4%
Clothing and Clothing Accessories	4.5%	3.4%
General Merchandise Stores	7.4%	7.3%
All Other Retail Trade	9.4%	8.0%
Transportation and Warehousing and Utilities	2.0%	2.0%
Information	1.6%	1.6%
Financial Activities	3.6%	3.6%
Services	47.7%	46.4%
Professional, Scientific, and Technical	1.9%	1.6%
Administrative and Support and Waste Management and Remediation	5.1%	6.9%
Education Services	2.0%	1.6%
Health Care	5.4%	4.8%
Social Assistance	2.4%	2.1%
Arts, Entertainment, and Recreation	3.6%	3.5%
Accommodation and Food Services	22.8%	21.4%
All Other Services	4.5%	4.4%
Public Administration	1.2%	1.1%
Total	100%	100%

Employment and earnings outcomes between females and males, students with disabilities and students without disabilities, and racial and ethnic minority groups and whites were less likely to be significant than in adult programs. Differences are even less evident when students who are attending postsecondary education are excluded from the comparisons.⁷⁹

There were still some differences even with the exclusion of students who were in higher education in the third quarter after leaving high school. Females were less likely to be employed and working full-time than males. Their median annualized earnings was 85 percent of males, and their median wage was 92 percent of males. Compared to whites, Asians and Pacific Islanders and Native Americans were less likely to be employed and African Americans were less likely to be working full-time. African Americans had a median annualized earnings that was 88 percent of whites. Students with disabilities were less likely to be employed than students without disabilities.

⁷⁹ Of the 2003-2004 students, the following percentages of each group were enrolled in higher education: 42 percent of females and 36 percent of males; 19 percent of students with disabilities and 41 percent of students without disabilities; and 40 percent of whites, 33 percent of African Americans, 55 percent of Asians and Pacific Islanders, 29 percent of Hispanics, and 26 percent of Native Americans.

Areas for Improvement

The majority of students were satisfied with the quality of their career and technical education program. Most were either employed or enrolled in a two- or four-year college during the third quarter after leaving their program.

Whereas the evaluation results are generally positive, there are areas that could be stronger. The lowest percentages of students indicated receiving training in basic skills in their CTE programs. Of those who did, they tended to say that their skills did not improve “a lot.” Although employers tended to be satisfied with the technical, workplace, and basic skills of their new employees, compared to two years ago, substantially lower percentages were very satisfied with the teamwork skills and their employees’ ability to accept supervision.

The students included in this evaluation are young, entry-level workers. It is not surprising, therefore, that their median wage is relatively low. One potential solution may be to increase the percentages of secondary CTE students who go on to postsecondary education or training, particularly for males, students with disabilities, African Americans, Hispanics, and Native Americans. Additionally, CTE students should be encouraged to seek jobs outside of accommodation and food services industries where wages have tended to be low.

As was found in previous evaluations, the postprogram wage rates of female students were lower than those for males. Secondary CTE should continue to work on closing the wage and earnings gaps between female and male students.

Workforce Investment Act Title I-B Program for Youth

The WIA Title I-B Youth program prepares youth for academic and employment success. In order to receive services, youth must be 14 through 21 years old, low income, and meet other criteria such as needing additional assistance to complete an educational program or to secure and hold employment. To be low income, one must be a welfare or food stamp recipient, homeless, a foster child, or have a family income below 70 percent of the lower living standard income level.

Eligible youth are assessed to determine academic, skill level, and support service needs. Strategies are developed for each person based on the assessment results. They may receive counseling, tutoring, job training, mentoring, or work experience. Other strategies include summer employment, study skills training, or instruction in obtaining a GED or equivalent. Youth may access information services through WorkSource, the state's one-stop career center system. Youth ages 18 through 21 may be coenrolled in WIA Title I-B Adult programs. At least 30 percent of the WIA Youth funds must be used to provide activities for eligible out-of-school youth.

ESD administers the program at the state level. Twelve local workforce development councils, in consultation with chief local elected officials, oversee WIA activities in local areas. Local youth councils assist the councils with the Title I-B Youth program.

For this study, participant records were obtained on 3,543 youth who left the program during the 2003-2004 programs year (July 1, 2003, through June 30, 2004). This study includes information from ESD wage files from Washington, Idaho, and Oregon, and federal employment records. In addition, 636 of the participants completed a telephone survey, providing further information on employment and satisfaction with the training.⁸⁰

The typical (median) participant was in the program for 12 months. There was, however, considerable variation in the amount of time participants spent in the program. One quarter was enrolled for less than 7 months, while another quarter was enrolled for over 19 months.

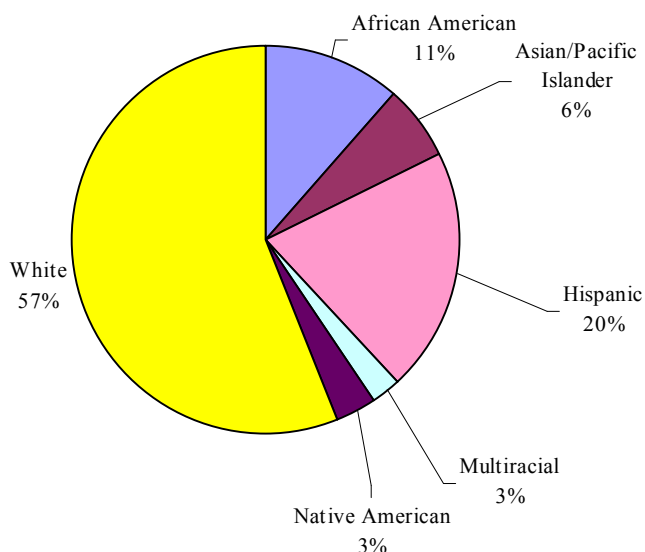
Participant Characteristics

WIA Youth participants were more racially and ethnically diverse than the state population ages 14-21 (Figure 1).⁸¹ Fifty-three percent were female.

⁸⁰ The responses from the participant survey were weighted to reflect the distribution of WIA Title I-B dislocated workers by Workforce Development Councils.

⁸¹ In this report, unless otherwise stated, racial and ethnic minority groups are mutually exclusive; that is, an individual belongs to one group only. The groups include the following: Hispanics of any race (also referred to as Hispanics); non-Hispanic African Americans (also referred to as African Americans); non-Hispanic Asians and Pacific Islanders (also referred to as Asians and Pacific Islanders); non-Hispanic Native Americans and Alaskan Natives (also referred to as Native Americans); non-Hispanic multiracial (also referred to as multiracial); and non-Hispanic whites (also referred to as whites). According to the 2004 *Washington State Population Survey*, of those ages 16-74, 80 percent are whites; 3 percent are African Americans; 1 percent are Native Americans; 7 percent are Asians and Pacific Islanders; 2 percent are multiracial; and 7 percent are Hispanics.

Figure 1
Percentage of WIA Title I-B Youth by Race and Ethnicity



Many WIA youth faced substantial barriers to success in school and the labor market. Thirty percent were high school dropouts when they entered the program.⁸² Eighteen percent had records of arrest or conviction, sixteen percent had a disability, and fifteen percent lived in households that were receiving public assistance.⁸³

Competency Gains

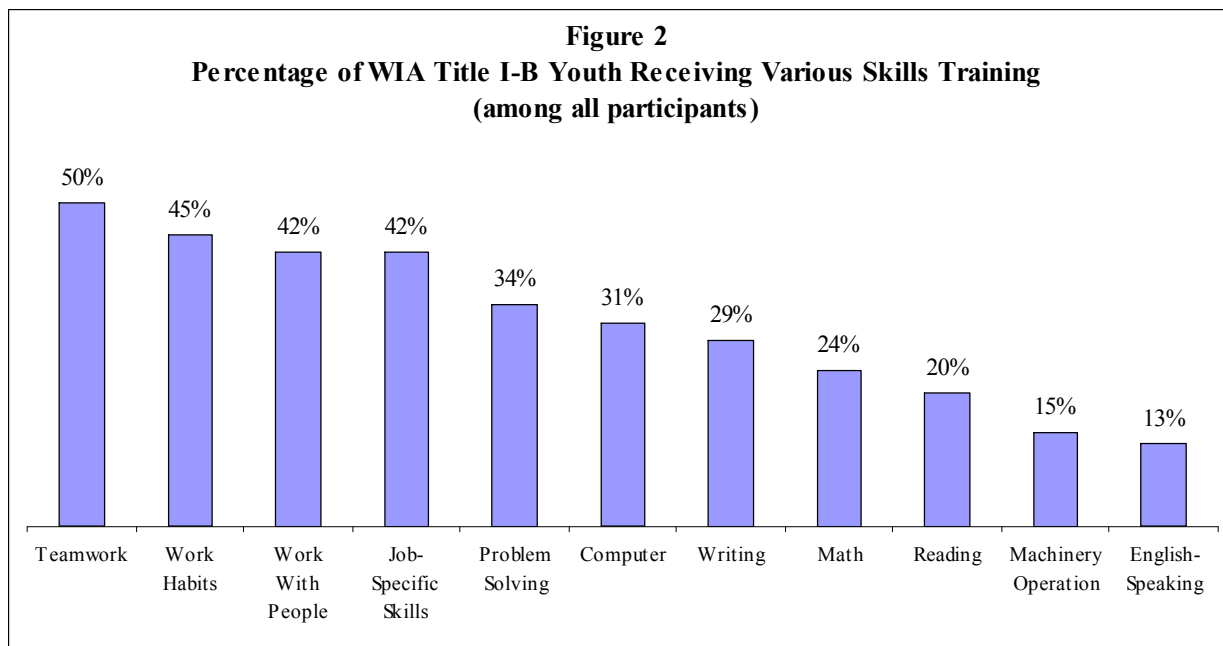
Based on survey results, most WIA youth entered the program for employment-related reasons: 87 percent enrolled to get work experience and 83 percent to learn skills for a new job.⁸⁴ Eighty-seven percent also enrolled for personal improvement.

The majority of WIA youth (63 percent) reported they did receive some type of training. As in the previous study, among the WIA youth leaving in 2003-2004, the most common type of training received was in general workplace skills (Figure 2).

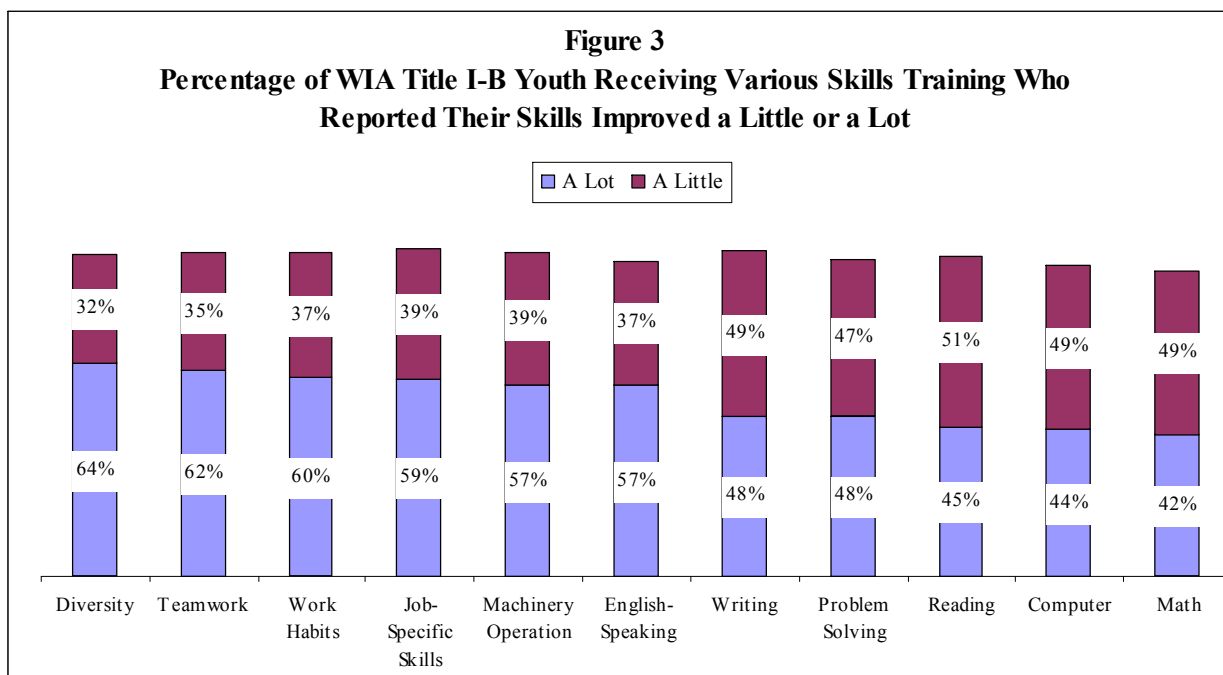
⁸² These are defined as youth who had no high school degree and who were not enrolled in school at registration.

⁸³ Those on public assistance includes 5 percent who received cash assistance from state or local General Assistance, Refugee Cash Assistance, or Supplemental Security Income; 8 percent who received TANF; and 2 percent who received both.

⁸⁴ Respondents could indicate more than one reason for enrolling in the program.



As in the past, nearly all WIA youth who received training reported that their skills improved (Figure 3). Higher percentages reported “a lot” of improvement in general workplace and technical skills than did so in basic skills. Fifty-seven percent of employed WIA youth indicated that their training was related to their employment during the third quarter after leaving their program, down from 65 percent so indicating two years ago.

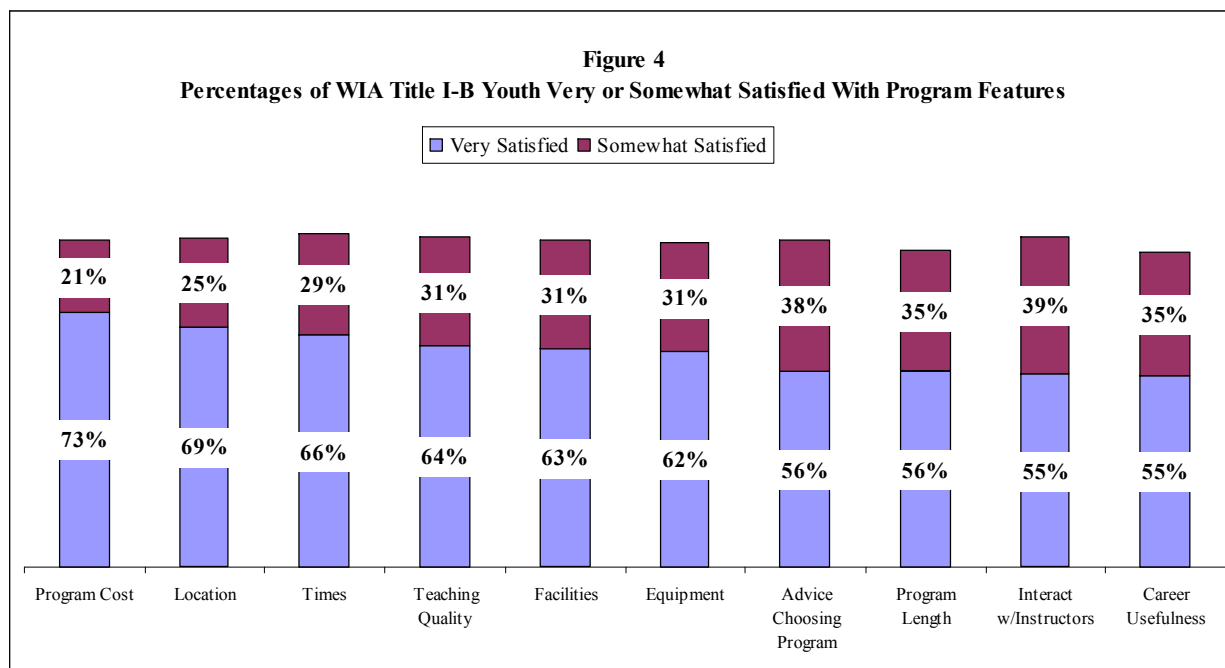


Promoting academic success is also an objective of the program. Administrative records provide information on school enrollment and high school completion for WIA youth.⁸⁵ Among younger youth,⁸⁶ data indicate substantially better outcomes for WIA youth exiting in 2003-2004 than exited two years ago (Figure 4).

Figure 4		
Educational Status of WIA Younger Youth Upon Leaving the Program		
	2001-02	2003-04
Obtained a High School Diploma	23%	38%
Obtained a GED	13%	4%
Still Enrolled in High School at Exit	25%	33%
Not in School, no Diploma or GED	39%	26%
Note: Diploma or GED could be obtained anytime during enrollment and up to the first quarter after exit.		

Participant Satisfaction

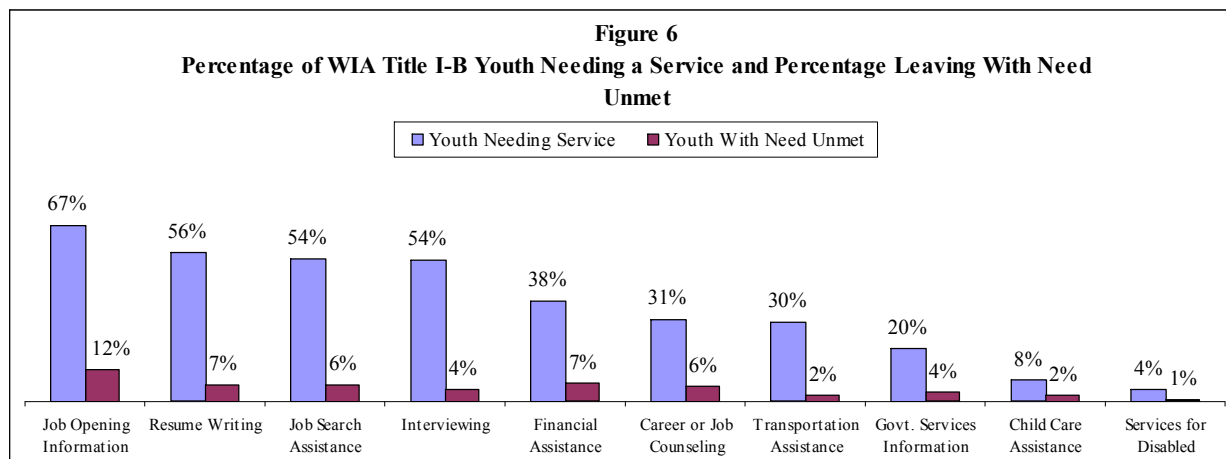
Survey results revealed participants were quite satisfied with the training and support services they received as part of their WIA Youth program. Ninety-two percent of the participants surveyed said they had met their educational objectives in the program, virtually the same percentage as two years ago. Overall satisfaction with the program was at the same level as reported two years ago (96 percent). The majority were “very satisfied” with program cost, location, and times (Figure 5).



⁸⁵ These records are collected through the SKIES data reporting system maintained by ESD.

⁸⁶ These youth were ages 14 to 18 when registering in WIA.

Based on the survey results, most of the participants who needed various support services while participating received them (Figure 6). Similar to two years ago, the services most frequently needed by participants were information on job openings, assistance with resume writing, interviewing, and job search assistance. Most participants had their needs in these areas met. The greatest unmet need remains for job opening information (12 percent of 2003-2004 youth and 17 percent of 2001-2002 youth).



Employment and Earnings⁸⁷

According to survey responses, 67 percent of the 2003-2004 WIA youth were employed during the period seven to nine months following the program (Figure 7).⁸⁸ To find out more about the students' postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain quarterly earnings and hours-worked information on those individuals with employment reported for unemployment insurance purposes (approximately 90 percent of in-state employment, with self-employment, active duty military, and those working for religious nonprofit organizations being the major groups of employment not included).

Record matches found 52 percent of the participants had employment reported to ESD during the third quarter after they left the program. About 23 percent of the WIA Youth participants were still enrolled in high school upon exiting the program. Among those who were not still in high school, 56 percent had reported employment.

⁸⁷ Several factors need to be considered when comparing outcomes for program participants over time. WIA replaced JTPA on July 1, 2000; the results through 2000 in Figure 6 are for JTPA Title II-C. Youth leaving programs during 2001-2002 entered a much weaker labor market than did those leaving during 1999-2000. The characteristics of these youth also changed. Especially important is the greater enrollment of younger youth under WIA than was the case during the last year of JTPA; the percentage of participants aged 16 or younger at registration increased from 24 percent to 40 percent. Younger youth are less likely to be employed than older youth.

⁸⁸ In the survey, students were asked whether they were employed or self-employed. Therefore, in most cases, the percentage who reported being employed will be higher than the percentage of those whose employment was found in ESD wage records.

Figure 7
Employment and Earnings of WIA Title I-B Youth in the Third Quarter After Leaving Program

	1995-96*	1997-98*	1999-00*	2001-2002		2003-2004	
	All	All	All	All	Not in High School	All	Not in High School
Percentage self-reporting employment during third quarter after leaving program	66	76	74	66	na	67	na
Percentage with employment reported by employers to ESD during the third quarter after leaving program	50	59	55	47	52	52	56
Median quarterly hours worked of those working	258	250	247	234	253	250	281
Percentage employed full-time (averaging 30 or more hours/week) of those working	32	27	28	27	29	29	32
Median annualized earnings of those working (not in higher education)	\$6,812	\$7,225	\$7,909	\$7,858	\$8,549	\$8,521	\$9,775
Size of household in which median earnings would support at poverty level	0.7	0.8	0.8	0.8	0.9	0.9	1.1
Size of household in which median earnings would support at twice poverty level	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Median hourly wage of those working (not in higher education)	\$6.96	\$7.32	\$8.22	\$8.22	\$8.30	\$8.25	\$8.41
Percentage self-reporting receipt of medical benefits from employer	36	35	40	38	na	31	na
Percentage self-reporting receipt of pension benefits from employer	20	18	18	17	na	14	na
Notes:	Earnings and wages are expressed in first quarter 2005 dollars. Poverty levels are based on federal poverty guidelines identified by the Department of Health and Human Services for 2005. *Figures for 1995 through 2000 are for the JTPA II-C Youth program.						

Among those not enrolled in high school or higher education, the median hourly wage⁸⁹ was \$8.41, and median annualized earnings were \$9,775. These earnings levels are low; however, remember these participants were young, entry-level workers, and many of them faced substantial barriers to success in the labor market. Despite the low wage and earnings, WIA Youth (and their JTPA predecessors) have experienced increases in both since 1995-96. Wages rates among youth participants, as one would expect, exhibited less variation than was observed in programs serving adults (Figure 8). The distribution of wages received by WIA Youth not enrolled in high school or higher education was:

Figure 8 Distribution of Hourly Wages of WIA Youth in the Third Quarter After Leaving Program	
Quartile	Hourly Wage
Highest	Above \$9.87
Third	\$8.41 – \$9.87
Second	\$7.63 - \$8.41
Lowest	Below \$7.63

Postprogram employment among WIA youth continues to be heavily concentrated in retail trade and services, with 22 percent in eating and drinking establishments (Figure 9).

⁸⁹ All wages and earnings are stated in first quarter 2005 dollars.

Figure 9 Industry of Employment of WIA Youth During Third Quarter Prior to Program and Third Quarter After Program		
Industry Group	All Youth	Youth Not In High School
Natural Resources and Mining	2.7%	2.3%
Construction	4.1%	4.5%
Manufacturing	6.9%	7.2%
Wholesale Trade	2.0%	1.9%
Retail Trade	18.7%	19.8%
Food and Beverage Stores	4.3%	4.3%
Department Stores	4.6%	5.1%
All Other Retail Trade	9.8%	10.4%
Transportation and Warehousing and Utilities	1.2%	1.4%
Information	1.7%	1.9%
Financial Activities	3.5%	3.6%
Services	57.2%	55.5%
Administrative and Support and Waste Management and Remediation	10.2%	10.3%
Health Care	8.8%	9.6%
Social Assistance	4.3%	4.2%
Accommodation and Food Services	22.0%	19.5%
All Other Services	11.9%	11.8%
Public Administration	2.0%	1.9%
Total	100%	100%

Employment and earnings outcomes between females and males, youth with disabilities and youth without disabilities, and racial and ethnic minority groups and whites were less likely to be significant than in other programs.⁹⁰ Female youth had median earnings that was 86 percent of males; however, their median wage was 95 percent of males. Youth with disabilities had median earnings that was 86 percent of youth without disabilities; their median wage was 95 percent of youth without disabilities. Compared to whites, Native Americans and African Americans were less likely to be employed, while Hispanics were more likely to be employed. African Americans had a median earnings that was 83 percent of whites and a median hourly wage that was 95 percent of whites.

Areas for Improvement

When reviewing the results of this evaluation, remember WIA Title I-B serves youth who are disadvantaged. Many of the participants included in this study faced substantial barriers to success in school and the labor market.

Most participants were very satisfied with the program, and support services remain a strong area for the WIA Youth program. Based on the survey results, most of the participants who needed support services received them. The greatest unmet need was for job opening information.

⁹⁰ These employment and earnings group comparisons were based on data from youth who were not in high school at exit.

Program administrators should consider placing even greater resources into promoting high school completion. Among youth who exited WIA during 2003-2004, many did obtain a high school diploma, and many were still enrolled in high school upon leaving the program. Too many, however, were neither in school nor had obtained a diploma.

Perhaps more attention should be given to basic skills instruction. According to survey results, among the WIA Youth who received basic skills training, relatively few reported substantial gains in math, writing, and reading skills.

Earnings among participants, as is typical of young entry-level workers, were relatively low. One problem is employment among WIA Youth is heavily concentrated in retail trade and lower-wage services. More should be encouraged to receive the job-specific skills training required for higher wage jobs.